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THE GERMAN RAILWAYS

BY
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AND
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REPRINTED FROM POLITICAL SCIENCE QUARTERLY
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AUTONOMOUS PUBLIC ENTERPRISE—THE GERMAN RAILWAYS *

WHEN the state becomes entrepreneur, selling goods or services on a voluntary basis, a distinctive set of administrative problems results. The characteristics of public enterprise are partly technical, partly empirical. Demand is fluent and frequently unpredictable, even when a legal monopoly exists. Prices are in flux. The market place often calls for swift and risky judgments. Where a relationship must be maintained with a body of consumers, sensitiveness to a kind of opinion is peculiarly important. In addition, the problems of internal management which attend all public administration are increased by the sheer mass of personnel and supplies.

These conditions of public enterprise seem to call for distinctive forms of organization, particularly in relationships to the political organs of government. The need, in a word, seems to be for a combination of stability and flexibility. The first conduces to deliberate, long-time growth; the second takes account of the changeable context of the market in which plans must be worked out. Stability is embarrassed by the flux of politics, for even when there is little real rivalry and seldom a shift of party control, the mere parade of personalities may be disturbing. Meanwhile petty legislative pressures may distort the course of development. The attempt to insulate administration from politics, of course, has not been confined

* Acknowledgment is made of the assistance of the Council for Research in the Social Sciences of Columbia University in studies which contributed to the background of this article.

to public enterprise. The methods by which modern governments have sought to protect administration, however, have resulted in considerable rigidity. This may be the effect of provisions such as the requirements that all receipts must be covered into a common treasury, that expenditures may be made only pursuant to law and subject to general budgetary prevision and control, that purchasing shall be by competitive bidding, and that employees shall be chosen by examination and shall enjoy a degree of security. Restrictions of this sort not only are understandable historically but also are salutary in themselves. In the further progress of administrative reform, however, it is likely that emphasis will shift from means to ends. The desirability of greater leeway in governmental administration is not confined to economic undertakings. But here the need for day-to-day flexibility is so crucial that it is more than a difference of degree; it amounts to a difference of kind.

In achieving a combination of stability and flexibility in the conduct of the economic undertakings of government, semi-autonomous forms of organization seem appropriate. A vast amount of spontaneous experimentation has occurred throughout the world. Practice has outstripped theory. But an extensive literature, especially in the German language, had begun to gather even before the War of 1914 and it was added to rapidly thereafter.¹ Discussions in English were scantier. In the United States students of government were long preoccupied in the struggle to achieve a modicum of administrative integration. Nevertheless the nature of the problem of the entrepreneurial state was not wholly overlooked. In 1917,

¹ Two citations suffice to illustrate this voluminous literature. On the eve of the *conf* of 1933, the most comprehensive single study in the German language was undoubtedly the symposium edited by Julius Landmann, entitled *Moderne Organisationsformen der öffentlichen Unternehmung*, published in four parts in 1931 and 1932 as volume 176 of the *Schriften des Vereins für Sozialpolitik*. In the railroad field, mention should be made particularly of the volume by Bernhard Witte, *Eisenbahn und Staat—Ein Vergleich der europäischen und nordamerikanischen Eisenbahnorganisationen in ihrem Verhältnis zum Staat* (published in 1932, in the *Weltwirtschaftliches Archiv*, Ergänzungsheft No. 4) which was mainly concerned with the degrees of autonomy found in the government-owned railroad systems.

W. F. Willoughby wrote suggestively, although briefly, on the utility of a scheme of subsidiary budgets in the conduct of the trading undertakings of the national government.² The vogue of government-owned corporations since 1917 has stimulated the flow of what is likely to become a formidable body of analytical material.³ In Great Britain the multiplication of statutory corporations, challenging the conventional pattern of ministerial responsibility, has awakened significant interest.⁴ In a field so prolix and in bulk so recent, analysis waits on description. But there is at least general recognition that the deliberate use of semi-independent structure in the organization of public undertakings rests upon a sounder basis than the promiscuous decentralization so often characteristic of administration in the past. The argument for industrial autonomy is more cogent than the case for independence in the organization of regulative functions.

But even in the conduct of public undertakings under conditions of settled policy, the ideal of autonomous organization is qualified. Limits are dictated by four sets of factors. These are partly political necessities, which would preclude complete autonomy even if it seemed desirable. But there is an inherent need for caution in liberating enterprises from the control of the responsible central organs of the government. The argument for public enterprise being in part that of plentiful and cheap capital, care must be taken, in the first place, that the interest charges incurred in behalf of an enterprise are not increased unduly by its separation from a governmental unit with broad taxing power. In the second place, the government

² W. F. Willoughby, "The National Government as a Holding Corporation", *POLITICAL SCIENCE QUARTERLY*, December 1917, vol. 32, pp. 515-21.

³ See, for example, the selected bibliography in John McDiarmid, *Government Corporations and Federal Funds* (Chicago, 1938). For a convenient and fairly up-to-date list of nationally owned corporations in the United States, see Ruth G. Weintraub, *Government Corporations and State Law* (New York, 1939), pp. 180-94.

⁴ Herbert Morrison, *Socialisation and Transport* (London, 1933); William A. Robson, editor, *Public Enterprise* (London, 1937); Lincoln Gordon, *The Public Corporation in Great Britain* (London, 1938); Terence H. O'Brien, *British Experiments in Public Ownership and Control* (New York, 1938).

is apt to have an inalienable stake in pricing, especially from the standpoint of its rôle as an arbiter of the claims of different classes of consumers. The political organs of government, thirdly, can hardly be indifferent to the conditions of labor in public enterprises, especially in times when legislation for private enterprise is increasingly tinged with the ideals of stability of employment, sustained purchasing power, and the enforcement of minimum standards. Finally, any government must be sensitive to the need of coördinating at least its own undertakings, and the more so because it is the lack of coherence in private enterprise that in part leads the state to become an active economic participant. The foregoing grounds for limiting the independence of public enterprises, it will be observed, are in addition to various fiscal purposes held by the state itself. These are divers; they may involve the wish to subsidize, the desire to protect the general treasury against the risk of loss, or the will to extract a profit. Thus the desiderata of autonomy and of control are in conflict. The need for a balance is universal; its resolution is an endlessly special problem, varying with the climate of opinion, the form of government, the nature of enterprises, and the many, overlapping motives that lead modern states to become involved in them. Analysis will profit by the consideration of particular cases.

An outstanding instance is the German railway system. It has been and it remains the largest single public enterprise in the world.⁵ It gains significance, furthermore, from the fact

⁵ This was true even before the additions of 1938 and later. The Austrian network, administered semi-autonomously but with relative centralization under the law of July 19, 1923, was absorbed in the German railways by the ordinance of March 17, 1938 (*Reichsgesetzblatt* [RGBl] I, p. 252). Cf. Theodor Kittel, "Die Deutsche Reichsbahn in Österreich", *Archiv für Eisenbahnwesen*, May-June 1938, pp. 525 et seq. In 1939, the Reichsbahn's net had grown from 55,032 to 63,054 km.; its average number of employees from 779,000 to 847,000; and its operating districts—stressed in its geographically deconcentrated scheme of management—had risen from 26 (to which they had recently been reduced) to 29. Cf. Adolf Sarter and Theodor Kittel, *Was jeder von der Deutschen Reichsbahn wissen muss* (Leipzig, 1939), pp. 69-70. Unless otherwise stated, the additions of 1938 and thereafter are not included in statistics given in the present article.

that for several decades, before the War of 1914 and after, German practice in the use of semi-autonomous administration was outstanding and the theoretical discussion of the problem was undoubtedly the richest in any country. There is additional interest in tracing the changes wrought under National Socialist rule, which raises the question of the rôle of semi-independent forms of organization when party competition is abolished and a concert of action imposed with almost military intensity. If this is considered the pathology of administration, be it remembered that clinical observation of the abnormal, with due allowance, may afford clues of general meaning.

The field of communications, obviously, is not wholly typical of the attitudes which are taken toward autonomy in the conduct of public enterprise. There is a disposition everywhere to subordinate the means of transport to the needs of the whole economy, or favored portions thereof. This is reflected in the degree of regulation which exists in countries in which railroads are privately owned. In post-war Germany, furthermore, the involvement of the Reichsbahn in reparations introduced a peculiar relation which has had a distorting aftermath. But for the observer of the organization of public enterprise, the story of the German railway network has a value quite apart from its inherent importance as a great undertaking.

I. ORGANIZATION

The governmental relations of the German railroads, and the main forms of their administration after they became publicly owned, may best be surveyed historically. Three periods may be distinguished, coinciding with broad phases of national development: from the beginnings of rail transportation until the close of the War of 1914, the span of the Weimar constitution, and the period of National Socialism. Only the stages since 1920 need be examined intensively. It was then, following unification, that autonomy was not only discussed but also applied from various motives, and subsequently contracted in a series of novel administrative arrangements.

a. *Control by the States prior to 1919.* For a long time after the first steam-propelled train was operated in Germany

in 1835, railways were privately built and managed. Charters were granted by the separate states and increasingly rigorous measures of control were imposed. An early landmark was the regulative law of Prussia in 1838, a model in form and content. Meanwhile the principle of government ownership was gaining ground. A number of states—Hanover, Oldenburg, Brunswick, Baden and Württemberg—constructed and operated railways at an early date. Prussia's policy was vacillating. For a decade after 1849, it built state-owned railways; but from 1859 to the seventies, under the influence of liberal economic doctrines, railroads in Prussia were again built by private capital. Prussia's system was still a mixed one, largely private, when Bismark began the abortive attempt to bring all railways under the control of the federal government. That ideal had been championed by the economist Friedrich List⁶ and expressed in the Frankfort constitution of 1848; it remained to be accomplished under the document drafted in Weimar seventy years later. Prussia was ready to transfer its still relatively small governmental system, but the other states held off. The federal railway office (*Reichseisenbahnamt*), ambitiously set up in 1873 to prepare for unification and subsequent supervision, found its usefulness largely in the negotiation of international railway conventions, in advising regarding tariff matters, and in facilitating military plans affecting the railroads.⁷ Balked in general unification, Bismark gave impetus to government ownership in Prussia. So thoroughly was the new policy carried out in the period from 1879 to 1895 that, whereas in 1875 only twenty-six per cent of the mileage in Prussia was public, two decades later ninety-five per cent was in the hands of the state. Beginning in 1879, the Prussian government railways were directed by a separate technical department, the ministry for public works. Bavaria adopted

⁶ Westenberger, "Friedrich Lists Wirken für ein deutsches Eisenbahnsystem", *Archiv für Eisenbahnwesen*, July-August 1920, pp. 505 et seq.; September-October 1920, pp. 809 et seq.

⁷ Adolf Sarter and Theodor Kittel, *Die neue deutsche Reichsbahn-Gesellschaft* (Berlin, 1924), p. 10.

this plan in 1907. The railroad finances, however, were part of those of the state.⁸

On the eve of the War of 1914, therefore, the direction of railroads was a state affair, the ownership prevaillingly governmental, and the policies dictated largely by state interests. These were frequently in conflict. Some aspects of traffic, of course, had been unified by provisions of the commercial code. But the proposal from Württemberg in 1902 that rolling stock be pooled got no further than a merger of freight cars. The various states, and especially their diets, were reluctant to relinquish local control. An expanding economy brought continual increases of traffic, which could be counted upon to sustain the still growing state networks.

The War strengthened the agitation for a single system. The army command favored a consolidated administration; public opinion became interested; and the Reichstag adopted a resolution which directed the chancellor to prepare a memorial on the unification of all railways.⁹ In the face of the continued opposition of some states, notably Bavaria, the government could not do more than vainly to propose a plan of collaboration, the "Heidelberg program".

Unification followed the collapse in 1918, which found the railways depleted and burdened. Their war-time task had indeed been formidable. It had been necessary to furnish equipment and personnel to Germany's allies and to maintain traffic in various occupied areas. Under the "Hindenburg program", adopted in the fall of 1916, many of the regular personnel of all ranks were replaced by less qualified employees. Maintenance was neglected. In accordance with the terms of the Armistice and the Treaty of Versailles, a good deal of equipment—upwards of 5,000 engines and 150,000 cars—was returned or transferred to other countries and more than three thousand miles of main and secondary lines were ceded. Meanwhile, the personnel, which had totaled 719,396 in 1914 and

⁸ For a further analysis of the financial relationships, see the continuation of this article in a later issue of the *QUARTERLY*.

⁹ The resolution was adopted on March 26, 1917. See Hans Willkomm, *Die rechtliche Ausgestaltung des deutschen Eisenbahnwesens von 1871 bis 1925* (Dissertation, Cologne, 1926), p. 29.

913,396 in 1918, swelled to 1,121,745 men in 1919.¹⁰ As late as 1917 the railways had shown a surplus of 786 million RM, but in the course of the next year the operating loss, not counting interest and amortization charges, was 1,324 million RM; in 1919 it was 4,366 million RM.¹¹

b. *Unified Operation under the Weimar Constitution, 1919-1933.* The new constitution, promulgated on August 11, 1919, ordained nationalization in the following terms: "It shall be the duty of the Reich to acquire as its own property all railroads serving as means of general communication and to administer them as a uniform system of transportation."¹² The seven state systems were accordingly consolidated under a state treaty of transfer concluded on March 31, 1920.¹³

For the observer, however, the striking administrative feature of operation during the Weimar régime was not unification—for that was interesting only because so long overdue—but the idea of autonomous organization. Like most constitutions of the epoch, Germany's fundamental law of 1919 reflected an awareness of administration. The concept of semi-independent organization was adumbrated in Article 92.¹⁴

¹⁰ Alfred von der Leyen, "Les Chemins de fer du Reich", *Les Annales de la Régie Directe*, vol. 15, 1922-23, p. 288.

¹¹ *Ibid.*, pp. 289-90.

¹² Art. 89. The translation is that given by H. L. McBain and Lindsay Rogers, *The New Constitutions of Europe* (New York, 1922), p. 193.

¹³ *RGBL*, p. 772. The presumption that the unified system would be organized as a semi-independent corporation was reflected in assurances to the former "railway states" that they would have places on the board of directors—a promise which was disregarded when a corporation was created pursuant to the Dawes Plan. The central government took the attitude that the board was too limited in numbers to permit representation of the *Länder* but the latter were successful in asserting their right as a matter of law. Cf. remarks of W. C. Simons, former president of the *Reichsgericht*, *American Bar Association Journal*, vol. 15, 1929, p. 767. Cf. also, *infra*, note 32.

¹⁴ "The national railway system, notwithstanding the inclusion of its budget and its accounts in the general budget and general accounts, shall be administered as an autonomous economic enterprise, responsible for its own expenditures including interest and amortization of the railroad debt and the accumulation of a railroad reserve fund. The amount of this amortization and of the reserve fund, as well as the purposes for which the reserve fund shall be used, shall be regulated by special law."

The working out of the slightly ambiguous declaration was complicated by two sets of factors. At first the financial predicament of the railroads rendered their independence impossible. When they became profitable, after stabilization, they were soon implicated in reparations under the Dawes Plan of 1924 and the Young Plan of 1930. These conditions reacted profoundly upon their organization. It is necessary to take account of four successive phases of structure between 1920 and 1933.

(1) *The period of parliamentary tutelage, 1920-1923.* Despite the administrative ideal set by the constitution, the conditions in 1920 and thereafter were hardly favorable to autonomy. Various political forces resisted any such arrangement. The *Länder*, for example, tended to rely on their influence in the central political organs to protect certain surviving stakes which they had in the transferred state systems. But the decisive obstacle to autonomy was the financial dependence of the railroads during a period of acute financial embarrassment. In 1920, for example, the ratio of railway expenses to revenues was 172.8 : 100, and in 1921, 108.5 : 100.¹⁵ In 1922 expenses substantially paralleled revenues, the coefficient being 98.1. During the peak of inflation in 1923 the coefficient again became unfavorable and reached the stupendous figure of 330.9.¹⁶ The severance during the Ruhr occupation of one of the most remunerative parts of the network, with the widespread dislocations of strikes and other resistance, contributed seriously to the predicament of the railroads. While aid from the general treasury was thus needed in large amounts, a departmental régime was almost unavoidable. On the other hand, once currency stabilization had been achieved, the reaction to the heavy drain of the railroad subsidies was a factor in the interplay of forces which led to a more self-reliant type of administrative arrangement.

¹⁵ Prior to 1924 the business year of the railroad system was from April 1 to March 31. Since 1925 the business year has been the calendar year.

¹⁶ A. F. Napp-Zinn, "Die Deutsche Reichsbahn-Gesellschaft", *Schriften des Vereins für Sozialpolitik* (Munich and Leipzig, 1931), vol. 176, part 2, p. 333.

(2) *The creation of the Unternehmen Deutsche Reichsbahn, 1923-1924.* During the period of subsidy, with ever mounting contributions from the treasury, the critics of the existing organization were stimulated. They pointed to a number of overt defects: to disturbances in operation, to overstaffing and bad morale, to augmented labor costs due to the introduction of the eight hour day, and to the sluggishness in the adjustment of tariffs. These were portrayed as signs of the need for a radical reconstitution of the enterprise. The agitation had several sources, and, although its practical consensus was the desirability of more autonomy, it had several ends. Some business groups, symbolized by Stinnes, advocated the abandonment of government ownership altogether. The National Federation of Industry in March 1922 suggested the transfer of the railways to a mixed corporation in which various phases of industry would be represented, along with public bodies and the railway personnel.¹⁷ The more extreme elements of labor, raising the cry of the "railroads to the railroaders", urged autonomy under very different auspices. The traffic experts, such as von Breitenbach, Hoff, Franke and von der Leyen, preferred government ownership but with an infiltration of commercial practices. In the latter view a majority of the Socialization Commission concurred.¹⁸

The outcome was a compromise, in which government ownership triumphed but notable steps were taken toward autonomy in management. By the time the sixth draft emerged from the discussions, the stabilization of the mark prepared the setting for a challenge to the self-reliance of the railroad administration. On November 15, 1923 the minister of transport, who had been one of the staunchest supporters of government ownership, announced the termination of national subsidies.¹⁹ The basis for the new régime was laid in the en-

¹⁷ *Die deutsche Eisenbahnfrage: Gutachten, erstattet für den Reichsverband der Deutschen Industrie* (Berlin, 1922).

¹⁸ *Gutachten der Sozialisierungskommission über die Organisation der Reichseisenbahnen* (Berlin, 1921).

¹⁹ Witte, *op. cit.*, pp. 47-48; Sarter and Kittel, *Die neue deutsche Reichsbahn-Gesellschaft*, pp. 13-14; Alfred von der Leyen, *loc. cit.*, pp. 293 et seq.

abling statute of December 8, 1923,²⁰ pursuant to which an ordinance was promulgated on February 12, 1924.²¹ There was thus created an autonomous undertaking having juristic personality of its own, under the name *Deutsche Reichsbahn*.²² Financial self-reliance was presupposed; the salient features of the plan were fiscal. Management was in charge of a director-general who was also minister of transport. It may be remarked in anticipation that the outline of the arrangement strikingly resembled the scheme instituted by the railway law of 1937.²³ In the face of foreign entanglements, the law of February 12, 1924 was in force barely a year. But its continued significance is the proof it afforded that the search for autonomous forms rose from indigenous sources, deeper than the external pressures soon to be embodied in the Dawes Plan.²⁴

(3) *The creation of the Deutsche Reichsbahn-Gesellschaft and the period of the Dawes Plan, 1924-1930.* A new national railway law enacted August 30, 1924²⁵ reconstituted the railways as an autonomous entity called the *Deutsche Reichsbahn-*

²⁰ *RGBl* I, p. 1179.

²¹ *RGBl* I, p. 57.

²² Gerhard Lassar, "Reichseigene Verwaltung unter der Weimarer Verfassung", *Jahrbuch des öffentlichen Rechts der Gegenwart*, vol. xiv (Tübingen, 1926), pp. 184-6.

²³ *Cf. infra*, pp. 502-4.

²⁴ Further indication of a domestic tendency was afforded by the law of March 18, 1924 (*RGBl* I, p. 287) which gave the post office a degree of financial independence. Central control remained closer than in the case of the railroads, but a managerial council (*Verwaltungsrat*) was injected. Subsequent developments paralleled the railways in some respects. Thus the *Verwaltungsrat* was replaced by an advisory board (*Beirat*) under the law of February 27, 1934 (*RGBl* I, p. 130). *Cf.* Wilhelm Ohnesorge, "Die Deutsche Reichspost", *Deutsches Institut für Bankwissenschaft und Bankwesen, Probleme des Deutschen Wirtschaftslebens* (Berlin and Leipzig, 1937), pp. 61 et seq.

²⁵ *RGBl* II, p. 272. In preparing this legislation, the railroad experts for the Dawes Commission—Sir William Acworth and Gaston Levetra—were joined by two German representatives to form a Committee of Organization, which sat from July 10 to 24, 1924. Three bills implementing the Plan were approved by the Economic Council on August 23, and then by the Reichstag, which took care to act by the majority necessary for constitutional revision, the main bill passing on August 29 by 311 to 127 votes. *Stenographische Berichte, Verhandlungen des Reichstags*, vol. 381, pp. 1087, 1134.

Gesellschaft, in order to give effect to the report submitted to the Reparation Commission on April 9, 1924, which was the basis of the London Convention of August 9 and 16, 1924. The new arrangement for the railroads became operative on October 30, 1924. The essence of the scheme was to mortgage the railway network and to secure its earnings for the partial payment of reparations (about 38 per cent). The details may be postponed for consideration in connection with finances generally.²⁶ Attention here may fitly concentrate on the scheme of supervision. From the standpoint of the development of autonomous methods, the important and unfortunate effect of the arrangement under the Dawes Plan was the confusion it left in some German minds between foreign intervention and the idea of autonomy in management.

The double inspiration of the new organization of the railways was reflected in its central organ, the Board of Management (*Verwaltungsrat*).²⁷ This body was partly an administrative device which was domestic in conception, and partly a method of international control. Half of its eighteen members were appointed by the German government or chosen by domestic holders of preferred shares; half were selected by the reparations trustee. Terms were for six years and were overlapping; reelection was allowed. The chairman, who was elected by the Board each year by a three-quarters vote, must be a German. Of the nine members named by the reparations trustee, five might be Germans; this indeed was the practice from the outset, only four being foreigners. Although invested with important managerial powers, the Board was expected to devolve much responsibility on a directorate, consisting of a Director-General—elected by a three-quarters vote and similarly removable—and a number of directors, who were appointed by the Board on the recommendation of the Director-General. The Director-General and the directors (who could

²⁶ The matter is dealt with in the second installment of this article.

²⁷ An advisory committee, concerned largely with rates, had been established by administrative action in 1922, while the system was still under parliamentary tutelage. The plan for the *Unternehmen Deutsche Reichsbahn* contemplated a possible *Verwaltungsrat*, but none was set up. Lassar, *loc. cit.*

not be members of the Board) were required to be Germans and their appointment had to be confirmed by the President of the Reich.

In addition to representation through one half of the Board of Management, the holders of reparation bonds had additional leverages. A Railway Commissioner (Gaston Leverve) was appointed for a three-year term by the foreign members of the Board. His ordinary duties were those of observation; his prerogatives were normally those of access to information. But if the company disregarded its obligations under the law, this officer had large potential powers as a virtual receiver.

These mechanical devices to assure payment of reparations to 1964, unless sooner discharged, were annoying enough, although in practice the extreme forms were not invoked. The most irritating feature, perhaps, was the seeming attack on the principle of public ownership contained in Acworth's original report and the view expressed by the Commission of Experts itself. The latter stated:

The whole spirit of possession by the Reich in the past was directed, in the first line, to conduct the railroads in behalf of German industry and then, in the second line, to conduct them as a profit-making undertaking. In view of the circumstances, a complete break with old traditions is a pressing necessity. We accept the inferences and recommend the transformation of the German railways into a "share company."

The act of August 30, 1924 blurred the conflicting principles and purported to treat them as consistent. It stated: "the company shall operate the railways in accordance with business principles, due regard being paid to German economic interests." So far as "business principles" meant skill and energy in management, of course, it could be said in truth, as many apologists within Germany have pointed out, that in the long run only railroads so operated could usefully serve the German economy.²⁸ But the risk of a contradiction was present.

²⁸ O. Conrad, "Zur finanzwirtschaftlichen Selbständigkeit der Deutschen Reichsbahn", *Archiv für Eisenbahnwesen*, July-August 1936, p. 741.

So far as the overriding of national policy was concerned, the original proposals had been softened during the period of negotiation. Thus provisions were made for a partial veto and partial initiative by the government in regard to rates. At the instance of the German members of the group of transportation experts, a special railway court (*Reichsbahngericht*) was instituted. The initiative in rate changes might be taken by the company, but the approval of the government (acting through the minister of transport) was required. In the event of a disagreement which had not been definitely settled at the end of six months, the company might appeal to the railroad court.²⁹ A further possibility for adjudication was provided in 1924. Disputes between the German government and the Reparation Commission, any government represented in it, the trustee, or the Railway Commissioner were to be referred to an arbitrator nominated by the president of the Permanent Court of International Justice.³⁰ A limited initiative in rate changes was left with the government, subject to appeal in case of dispute to either the court or the arbitrator.³¹

The novel hybrid arrangement of 1924, effective on October 30, was in force for a little over five years, when the adoption of the Young Plan made possible a modification of the organic railway act in 1930. During this period alterations were precluded by international agreement. The changes wrought were merely incidental and non-statutory, although the recognition of the right of representation of the states in the Board of Management was somewhat alien to the general ideal of unification and autonomous administration, even if not in conflict with the distinctive features of the act of 1924.³²

²⁹ Sec. 44 of the law of 1924. Apart from rates, the government possessed a veto over the construction of new lines and the conversion of secondary lines (sec. 37). For an account of decisions of the railway court, cf. *infra*, p. 500.

³⁰ Sec. 45 of the law of 1924.

³¹ Sec. 33 (5) of the law of 1924.

³² The Court of State (*Staatsgerichtshof*) on May 7, 1927, recognized the right of Prussia to name a member to the Board of Management. Later, by a decision of November 25, 1930, a similar right on the part of Bavaria, Saxony, Württemberg and Baden was recognized. Napp-Zinn, *loc. cit.*, p. 363. Dr. Napp-Zinn speaks of this as "a very contestable decision, with which,

In Germany generally, the five-year period of the Dawes Plan was one of relief after stabilization, of relative recovery and seeming reconciliation, of capital-building, of industrial activity followed by stagnation, with the tide turning throughout the world in 1929-30. During this period the railways contributed to reparations, but the rate structure continued to be shaped from the standpoint of German economy rather than mere considerations of net revenue.³³ Friction between Reichsbahn and government was perhaps more a reflection of the autonomous elements than of the foreign taint in the railway organization. The members of the Board of Management appointed by the government often voted against it with the others. Some parliamentary criticism struck at the presence of large suppliers on the Board.³⁴ Doubtless much of this was soundly taken. But unfortunately the public reaction, influenced by the attacks of deputies and labor leaders, stigmatized the railway system as a "foreign company".³⁵

(4) *The Young Plan, the reorganization of the Deutsche Reichsbahn-Gesellschaft in 1930, and its operation, 1930-1933.* Foreign participation in railway administration was abandoned with the acceptance of the Young Plan in 1929³⁶ and its

however, the Reich must comply." For the English text of the decision, cf. H. Lauterpacht, *Annual Digest of Public International Law Cases—Years 1929-1930* (London, New York and Toronto, 1935), pp. 330-3.

³³ Conrad, *loc. cit.*, p. 741; for a comment on the new rates of August 1, 1927, which entailed a revenue loss of 80 million RM, cf. Hans Baumann, *Deutsches Verkehrsbuch* (Berlin, 1931), p. 218. The trend of rates will be considered further in a later installment of this article.

³⁴ Cf. *Stenographische Berichte, Verhandlungen des Reichstags*, vol. 427, p. 4284 (A, B). In the sitting of May 20, 1930, the Socialist deputy Scheffel declared that "many things are rotten in Dormmüller's state". *Ibid.*, p. 5214 (C). He was hardly thinking of foreign influences.

³⁵ Theodor Kittel, "Die Grundgedanken der neuen Reichsbahn-Gesetzgebung", *Archiv für Eisenbahnwesen*, March-April 1937, p. 259. The writer remarks that even when foreign supervision had been wholly eliminated, "the Reichsbahn had still to bear the consequences of this unfortunate attitude."

³⁶ On September 16, 1928, an agreement was concluded in Geneva among the participating states to reconsider the reparations question through committee. Proposals reported on June 7, 1929 were approved in principle at The Hague in August 1929, and the plan of a revised railway law, drafted by a mixed committee, was accepted at a second conference at The Hague in January 1930.

incorporation in the revised railroad law of March 13, 1930.³⁷ This statute fixed the organic structure of the system for nearly seven years, although the financial obligations originally entailed were drastically modified even before the National Socialists took control in 1933.

The settlement of 1930 retained the main administrative features of the statute of 1924. The railways were still incorporated as a *Gesellschaft* and were so entitled. Alterations in organization, though not absolutely forbidden, were subject to international restrictions.³⁸ The effort was still to assure an autonomous administration and to that end a powerful Board of Management of eighteen members was retained as the central organ of the system.³⁹ But the changes were crucial, being partly fiscal, partly structural. Both were calculated to remove foreign control in internal matters, while preserving the railways as a source of reparations.

On the fiscal side, the arrangements canceled the mortgage bonds held by the reparations trustee, which constituted a first claim upon all railway properties. In lieu of other forms of railway contribution, it was stipulated that the company should pay, as a contribution of the German railways to the

³⁷ *RGBl* II, p. 369.

³⁸ The Hague convention (Annex VI, A) permitted alterations which respected "the independent character of the Company with its autonomous administration", subject to approval by a permanent expert joint committee.

³⁹ Regarding the functions of the Board, sec. 15 of the new statutes, under the act of 1930 provided: "The Board of Management shall control the management of the company and shall decide on all questions of importance, or of principle, or of general application, and more especially on such questions and matters as are set out below: the appointment of the Director-General and of the superior officers on the recommendation of the Director-General; the budget proposals; the balance sheet and the profit and loss account; the distribution of profits; the application of the liquid resources of the company; the authority to take up loans and credits at the charge of the company, and to give mortgage security for the same; the approval of any expenditure on capital account beyond such limit as may be fixed by the Board; the approval of the general regulations governing the legal status and conditions of service and of pay of the employees, including the general regulation of salaries and wages."—Here, as elsewhere in quoting from the act of 1930, the English text is that given in Reparation Commission, *Official Documents* (1930), XXIII, Appendix, p. 243. The Board was required to meet at least once every two months.

reparation annuities payable by the Reich, a tax to an amount of 660 million reichsmarks per annum. This fixed charge was bulwarked in the following terms:

The reparation tax shall be paid out of the operating receipts of the company with recourse, if necessary, to all reserves. It shall rank after the expenditure on personnel and on the same footing with expenditure on material and consumable stores; it shall enjoy priority over any other tax now levied on the *Reichsbahn-Gesellschaft*, or which may be so levied in the future, and shall rank prior to any other charge, by way of mortgage or otherwise, on the company.

Payment of the so-called tax was to be made in monthly installments directly to the Bank for International Settlements. The charge was to run until April 1, 1966.

On the structural side, the act of 1930 provided that all eighteen members of the Board of Management should be of German nationality, chosen by the government or by the holders of preferred shares. The Board might "delegate its powers, so far as it thinks fit, to a permanent committee consisting of six members."⁴⁰ The office of Railway Commissioner was abolished. The 1924 arrangements for the control of rates continued unchanged. Increases in capital through the issuance of further preferred shares were allowed but only with the assent of the government.⁴¹ "The government of the Reich", stated the act, "is entitled to send one representative to the meetings of the Board of Management, in accordance with section 14 of the company's statutes."⁴²

Internally considered, the structural arrangements of 1930, though essentially the same as in 1924, emphasized both the prerequisite of German nationality and also the managerial

⁴⁰ Previously it had been necessary that three members of the executive committee should come from each of the two groups in the Board and that one, at least, be of foreign nationality. In recognition of the possibility of mixed ownership through the sale of preference shares, it was provided (sec. 17 of the statutes, that is, by-laws) that "One of the members shall be chosen from the representatives of the preference shareholders of Group A if they so desire." *Cf. infra*, p. 501.

⁴¹ Sec. 3 of the statutes.

⁴² Sec. 32 of the law.

oversight of the government. The new scheme provided: "The Director-General shall be appointed for a period of three (3) years by the Board of Management, which shall first get in touch with the government of the Reich; he shall be eligible for re-appointment."⁴⁸ As in 1924, the directors were to be appointed by the Board on the recommendation of the Director-General; but now a simple majority, not a three-fourths vote, was sufficient for the choice of the Director-General and the directors, all of whom must be confirmed by the President of the Reich. In regard to the removal of the Director-General, the provisions of 1930 tended to strengthen the relative power of the Board internally and of the government in relation to the system as a whole. The arrangement in 1924 had required a three-fourths vote to remove the Director-General. The act of 1930 stated that "The Board may at any time remove the Director-General."⁴⁹ At the same time, the government was given the right of initiative in the possibly critical matter of removal. "Where the government of the Reich", it was said, "is of opinion that the Director-General has violated the company's statutes, it may require the Board of Management to take a decision in the discharge of the Director-General."

⁴⁸ Sec. 19 of the statutes.

⁴⁹ *Ibid.* This prerogative was qualified only by the slight deterrent which might inhere in the attached stipulation: "The removal of the Director-General shall not affect the rights to salary and allowances which he may possess under his contract of appointment." The theory of autonomous administration of public enterprise in Germany has sometimes attached importance to the fact that, in accordance with German corporate practice, the operating heads (*Vorstand*) are often engaged under contracts of employment for fixed periods, during which their salaries cannot be stopped although their authority may be entirely withdrawn. German corporate law and custom were marked by the notion of a separation of oversight (conducted by an *Aufsichtsrat* in behalf of the stockholders) and management proper. This separation had useful implications from the standpoint of the conduct of public enterprise on a corporate basis. In special cases like that of the Reichsbahn, however, the distinction was blurred; thus the Board was significantly called *Verwaltungsrat*, not *Aufsichtsrat*. National Socialism, by means of extra-legal pressures but also expressly by the terms of the new corporation law of January 30, 1937, has tended to strengthen the position of the *Vorstand* in corporate industries generally; it has done this at the expense of the *Aufsichtsrat* but especially at the expense of the stockholders' meeting.

The liquidation of the Young Plan began very shortly. The Hoover arrangement of 1931 introduced a moratorium. In 1932 the Lausanne Conference resulted in the instrument of July 9.⁴⁵ Germany was to "deliver to the Bank for International Settlements German government five per cent redeemable bonds, to the amount of three milliard reichsmarks gold of the present standard of weight and fineness." It was stated that "On its coming into force the present Agreement will put to an end and be substituted for the reparation régime provided for in the agreement with Germany signed at The Hague on January 20, 1930, and the agreements signed at London on August 11, 1931, and at Berlin on June 6, 1932; the obligations resulting from the present Agreement will completely replace the former obligations of Germany comprised in the annuities of the 'New Plan.'" The ramifications of the Lausanne understanding need not be explored. It suffices to note that the certificate of obligation for the payment of the reparation tax given to the Bank for International Settlements was to be returned to the Reichsbahn. Before National Socialism came to power in 1933, therefore, the liberation of the railways was substantially accomplished.

c. *The Organization of the Railroads under National Socialism, 1933-1939.* The railway structure since 1933 has had two chronological phases. The first period was one of practical adaptation of the act of March 13, 1930, which continued in formal force. The second was inaugurated by the new organic act of February 10, 1937, which was elaborated without important structural change in the railway law of July 4, 1939. Each phase claims attention in turn, although especial interest attaches to the acts of 1937 and 1939.

It was to be expected that, whether by practical adjustment or by formal change, increased emphasis would be placed upon the subordination of railroads to the coordinating purposes of the ascendant state. In tracing the reorganization of the rail-

⁴⁵ *Final Act of the Lausanne Conference* (mimeographed official release). The settlement of 1932, simply stated, was for three billion RM bonds to be marketed later through the Bank for International Settlements. Actually nothing was paid after 1931.

roads wrought by National Socialism, therefore, it is appropriate to take account, not only of the confusion of the autonomous form with reparations, but also of certain types of friction which had occurred since 1924 between the government and the railway management. These may be illustrated by noting certain questions decided by the special railway court after 1924.

Note has already been taken of the existence of the special railway court originally provided by the law of August 30, 1924.⁴⁶ A decision of March 13, 1926 had gone against the government in a question of tax adjustment.⁴⁷ On the other hand, in the same year the ministry of labor had been upheld in a decision concerning labor conditions on the railroads.⁴⁸ Similarly, a little later, it had been ruled that the *Reichsbahn-Gesellschaft* was not exempt from the Prussian state stamp tax.⁴⁹ But the decision of the special railway court which had been of most moment was that of August 24, 1928, clearing the way for a change in the rate structure and making possible increases of freight and passenger charges calculated to bring 250 million RM of additional revenue.⁵⁰ This experience with judicial adjustment had hardly been conclusive. Certainly it had not shown that a device such as the special railway court might not be a useful adjunct in safeguarding a scheme of

⁴⁶ Under sec. 44 of the law of 1924 the court was to consist of a president appointed by the head of the *Reichsgericht* and of two members "appointed for each difference by the President of the *Reichsgericht*, the one on the nomination of the Government and the other on the nomination of the Company. . . ." Cf. *supra*, p. 494.

⁴⁷ *Archiv für Eisenbahnwesen*, July-August 1926, p. 995. A law of August 10, 1925 (*RGBl* I, p. 352) sought to require that national undertakings contribute to communities in aid of the housing of their employees. The court found this requirement incompatible with the tax exemption guaranteed to the *Reichsbahn-Gesellschaft* in sec. 14 of the railroad law of 1924, the priority of which it recognized as an international obligation. The government deferred to a declaratory judgment in this case.

⁴⁸ *Ibid.*, September-October 1926, p. 1203.

⁴⁹ *Ibid.*, March-April 1928, p. 552.

⁵⁰ *Ibid.*, November-December 1928, p. 1526. Additional cases are cited by Franz Albrecht Medicus, "Reichsverwaltung", *Jahrbuch des öffentlichen Rechts der Gegenwart* (Tübingen, 1932), vol. 20, p. 73.

autonomous public enterprise. But, in the international setting in which such adjudication had been cast, it was viewed by the exigent régime that took hold in 1933 as an inconvenient, even dangerous, element of irresponsibility in an essential service.

(1) *The period of practical modification of the law of 1930.* In the period through 1936, the curtailment of autonomy was accomplished largely within the frame of the law of 1930. A formal act of February 27, 1934,⁵¹ which described itself as a "law concerning a simplified and more economical administration," made a number of minor structural changes. Among other things, it abrogated the state treaty of March 31, 1920 and thereby abolished the particularistic prerogatives of the *Länder* and deprived them of the right they had won to name five members of the Board of Management.⁵² The central government thus attained the right to name all of the members of the Board. This was not curtailed in practice by the existence of two members chosen in behalf of the preferred shareholders. The latter were regarded as really certificate holders; their voting right was exercised by the president of the Court of Audit who, in consultation with the cabinet, selected those who were to be their ostensible representatives.⁵³

The degree of transformation that could be accomplished within the existing form was illustrated in the change wrought quickly in the personnel of the Board of Management. Of the eighteen individuals who were members in 1931, only three were still serving in the middle of 1933. The rapidity and extent of the inundation was shown in the fact that only one change in the membership of the reconstituted Board occurred between the middle of 1933 and 1936. Since 1933, the presiding officer has been a state secretary in the ministry of transport.

⁵¹ *RGBl* I, p. 130.

⁵² *Supra*, note 32. The sovereignty, so-called, of the *Länder* was abolished by the law of January 30, 1934 concerning the reconstruction of the Reich (*RGBl* I, p. 75) in conjunction with an executive ordinance of February 2, 1934 (*RGBl* I, p. 81).

⁵³ Theodor Kittel, "Die Grundgedanken der neuen Reichsbahn-Gesetzgebung", p. 262.

The adjustment which was going on within the old law was symbolized by the dropping of the word *Gesellschaft* in the title of the railway organization. The term, indeed, had become no more than a token of an autonomous intent, significant administratively if at all. The founders' shares had been reserved to the Reich from the outset; they had never been issued and constituted a mere bookkeeping entry which evidenced the exclusive ownership of the railroads by the central government. The preferred shares, as has been noted, carried no practical control. The new régime could hardly avoid giving considerable administrative leeway to so vast an affair as the railways, but, especially against the background of its early application to the Reichsbahn, the group in power had no fondness for *Gesellschaft* as an emblematic word.

(2) *Formal reorganization under the laws of February 10, 1937 and July 4, 1939.* The structural changes wrought in 1937 gave occasion for the celebration of a recapture of the railroads which had long since been effected. On January 30, Hitler informed the Reichstag "that in the sense of the restoration of German equality, the German railways and the German Reichsbank have been stripped of their previous character and have again been restored to the Reich's complete sovereignty."⁵⁴ The last and only formal filaments of the agreement at The Hague were brushed off. On February 2, the veteran Director-General of the railways, Dr. Julius Dörpmüller, was appointed to the new post of minister of transport, in which were fused the duties of general manager.⁵⁵ Without breaking a continuity of personal leadership which antedated the victory of National Socialism, therefore, the articulation of the railways in the political organization of the Reich was symbolized by placing him in the cabinet. On February 10, 1937, the law concerning the new organization

⁵⁴ *Ibid.*, p. 257; *New York Times*, January 31, 1937, p. 27.

⁵⁵ The new ministry was formed by the division of the former ministry for posts and transport. Its head, Eltz von Ribenach, a survivor from pre-Nazi governments, resigned at this time.

of the Deutsche Reichsbahn and the Reichsbank was decreed,⁵⁶ capped on July 4, 1939 by the law concerning the Deutsche Reichsbahn (*Reichsbahngesetz*).⁵⁷

The decree-laws of 1937 and 1939 were in fact superimposed upon the system. The name which they used—Reichsbahn, without the term *Gesellschaft*—merely confirmed a change effected in 1936. Structurally, two important alterations were made in 1937. In the first place, the "leader principle" of direct and personal devolution was recognized in the provision that the general manager was at the same time to be a cabinet minister. In the second place, consistently with the foregoing, the Board of Management—around which autonomous administration had supposedly revolved but which had already been reduced to a rôle more consultative than authoritative—was abolished. Its place was taken by a purely advisory although respected body, the *Beirat der Deutschen Reichsbahn*.⁵⁸ The paramount position of the minister of transport was emphasized in the edict of February 12, 1937 concerning the working rules (*Geschäftsordnung*) for the Deutsche Reichsbahn,⁵⁹ and again in the administrative ordinance of July 1939.⁶⁰ The minister, it was stated, is "the manager" (*Leiter*) of the Deutsche Reichsbahn. In this capacity he is called "Director-General of the Deutsche Reichsbahn". He has the final exclusive decision in all questions which are reserved to him according to this administrative ordinance and the business regulations (*Geschäftsanweisungen*) of the Deutsche Reichsbahn or which he elects to handle himself in individual cases. He has an all-embracing regulatory power. Below him, the rôle of the collegial *Vorstand* is now being played by a state secretary (acting also as a deputy director-general) and department heads (*Ministerialdirektoren*) in the ministry of transport.

⁵⁶ *RGBl* II, p. 47.

⁵⁷ *RGBl* I, p. 1205.

⁵⁸ The law of July 4, 1939 reduced the membership of this body to fourteen: they are appointed by the cabinet, with the exception of two, who are selected by the deputy leader, and those chosen ostensibly in behalf of the holders of preferred stock.

⁵⁹ *Reichsministerialblatt* (*RMBl*), p. 58.

⁶⁰ *RMBl*, p. 1313. *Cf. Die Reichsbahn*, July 19-26, 1939.

But the separate existence and coherence of the railway system as an economic entity have been recognized in the declaration that it constitutes a "separate property of the Reich" (*Sondervermögen des Reiches*). The term has a juristic and an economic connotation. From the legal standpoint, the phrase implies that the Reichsbahn leads a juristic life of its own, has its own assets and liabilities, enters into contracts in its own name and for its own account; that it can bring suits and be sued; and that it is authorized to take up loans (the consent of the finance minister being required, however). From an economic standpoint, the term *Sondervermögen* is equally significant. The separation of the Reichsbahn, as also the Reichspost, from the other assets of the Reich arose originally from the necessity of placing these vast undertakings on their own feet, self-reliant in regard to their credits with heightened responsibility, and able to act with alacrity in accommodating their operating policies to the economic situation. From these standpoints, it may be recalled, in summary, that the status of the railway system under the laws of 1937 and 1939 has presented many of the characteristics of the *Unternehmen Deutsche Reichsbahn* of 1923-4.

(3) *The railway personnel under National Socialism.* A brief survey of the elements of change and of continuity in the treatment of personnel is a necessary supplement to the foregoing discussion of structural developments. Vast, indeed, are the direct implications of a body of 800,000 workers. Counting their families, two and a half million persons have been involved. One German in twenty-five has derived his economic support from the Reichsbahn.

The treaty of acquisition in 1920 provided that the railway officials, salaried employees, and workers should be taken over and that those who were considered officials (*Beamte*) under the laws of the several states should automatically become officials of the nation, subject to the protection of Article 129 of the constitution and of the civil service law of May 18, 1907. When the railway system was reconstituted as the *Reichsbahn-Gesellschaft* in 1924, the arrangements regarding personnel

were a compromise. The experts who advised the Dawes Commission would have preferred to deprive the railway employees of all governmental attributes. This would have been in accordance with the spirit of the Dawes Plan; besides, the logic of thoroughgoing autonomy seemed to require it. The government of the Reich was naturally opposed; its policy coincided with the demand of the railway personnel that their vested rights be preserved. It would have been strange had the other view triumphed. Semi-independent administration of railways has been introduced in many countries but no such scheme, apparently, has ventured to remove the personnel wholly from the civil service.⁶¹ In countries of private operation, moreover, the railroad workers tend to take on more and more elements of status; at many points their position already approximates that of a civil service. Under the law of 1924, the officials of the German railways remained officials: they were subject to most of the essential safeguards and disabilities of official status; but in name (*Reichsbahnbeamte*) they were separate.⁶² The formal distinction gave the leaders of National Socialism opportunity for a minor paper conquest, for there was the great body of railway officialdom to rescue from ambiguous alienage and to welcome home to the Reich.

The aftermath of the armistice, as has been remarked, brought a swollen railway personnel—1,123,000 in 1919, as against 693,000 in 1913. Between 1919 and 1926 about 400,000 persons were dropped from the unified system.⁶³ A contraction of personnel took place again after a high point in the busy years, 1928-9, when the aggregate was 713,119; in 1932 the total was down to 600,595. The increase thereafter is shown in the following table:⁶⁴

⁶¹ Witte, *Eisenbahn und Staat*, pp. 197-8.

⁶² The compromise was embodied in detail in the national railway personnel law of August 30, 1924 (*RGBl* II, p. 287). The amendment to the railway law in 1930 (which remained the basic law of the railway system until 1937) did not change the underlying conditions of personnel.

⁶³ Julius Dorpmüller, "Die Deutsche Reichseisenbahn 1918-1936", *Deutsches Institut für Bankwissenschaft und Bankwesen, Probleme des Deutschen Wirtschaftslebens* (Berlin and Leipzig, 1937), p. 41.

⁶⁴ *Schriften des Instituts für Konjunkturforschung, Halbjahrsberichte zur Wirtschaftslage*, November 1938, p. 173.

PERSONNEL OF THE GERMAN REICHSBAHN

Year	Workers and Salaried Employees	Civil Servants	Total	Percentage of Civil Servants in total
1929	404,303	308,816	713,119	43.3
1932	306,481	294,114	600,595	48.9
1934	356,581	274,324	630,905	43.4
1936	377,683	282,260	659,943	42.8
1937	419,984	283,562	703,546	40.3
1938	471,722	288,639	760,361 ⁶⁵	37.8

But in understanding recent policy regarding the assimilation of the Reichsbahn to the civil service, proper, it is important to bear in mind the distinction between officials (*Beamte*), salaried employes (*Angestellte*),⁶⁶ whose relationship is one of contract rather than status, and laborers (*Arbeiter*). The two latter categories do not have the prerequisites nor all the perquisites of the permanent civil service. The distinction, under one set of names or another, exists in most countries though it is seldom clear; Germany, especially, has stressed it as a formal demarcation.⁶⁷ Rigidity in the personnel of a large public undertaking is apt to be lessened by keeping down the proportion of full civil servants. In the decade before 1933, the managements of autonomous public enterprise in Germany were pushing in that direction. It is interesting to note how far the tendency has been carried since the advent of National Socialism. In 1925 about 45 per cent of the total personnel of the Reichsbahn consisted of officials; in the same year about 85 per cent of postal employees held that status. In 1929, the percentage on the Reichsbahn was 43.3.⁶⁸ It rose, naturally, during the contraction of railroad

⁶⁵ The annual report (*Geschäftsbericht*) for 1938 indicated a total maximum personnel, including Ostmark and Sudeten, of 922,200, of whom 38.8 per cent had the status of civil servants; the average was 846,559. Cf. Sarter and Kittel, *Was jeder von der Deutschen Reichsbahn wissen muss*, p. 46.

⁶⁶ *Angestellte* are characteristically white-collar, or brain, workers, employed on a temporary contractual basis. In 1937 there were 4,000 of this category employed on the Reichsbahn.

⁶⁷ Cf. article on "Amt" by G. Müller-Machens in *Staatslexikon*, vol. 1 (5th edition, Freiburg, 1926), pp. 154-55. Cf. also comparisons drawn in G. E. Robinson, *Public Authorities and Legal Liability* (London, 1925), p. lxii.

⁶⁸ Cf. table, *supra*.

operations in the next few years, being 48.9 per cent in 1932. Thereafter the proportion of officials dropped, being 43.4 per cent in 1934, 42.8 in 1936, 40.3 in 1937, and 37.8 in 1938.⁶⁹ A French observer is struck by the relatively high percentage of employees on the German railways who are not civil servants in the full sense.⁷⁰

The declining proportion of civil servants would in any case qualify the importance of the steps taken since early in 1933 to bring railway officials under the formal roof of the general civil service. The law of April 7, 1933,⁷¹ which declared its purpose to be the "restoration of the professional civil service", and the supplementary decrees applied to Reichsbahn employment as regards the paragraphs relating to Aryans and to communists. The comprehensive civil service act of January 26, 1937 extended to the railways.⁷²

Meanwhile "the restoration of the professional civil service", even in the technical field of railroading, showed one aspect of its intent. Between 1923 and 1938, about 17,000 persons (of whom 3,000 had official status) were given preferential promotions on account of the affiliation with the NSDAP.⁷³ But

⁶⁹ After the absorption of railways in Ostmark and Sudeten, the percentage was 38.8.

⁷⁰ Marcel Peschaud, "Le Reich et ses chemins de fer", *Revue Politique et Parlementaire*, March 10, 1936, p. 451.

⁷¹ *RGBl* I, p. 175.

⁷² *RGBl* I, p. 39. Also applicable to railway personnel are the following: the national disciplinary service act of January 26, 1937, *RGBl* I, p. 71; and the national principles governing the appointment and promotion of national and state employees, October 14, 1936, *RGBl* I, p. 893. Cf. James Kerr Pollock, *The Government of Greater Germany* (New York, 1938), pp. 104 et seq., 110.

⁷³ E. Ziche, "Die Leistungen der Deutschen Reichsbahn nach dem Geschäftsbericht 1937", *Archiv für Eisenbahnwesen*, July-August 1938, p. 900. The veteran manager of the Reichsbahn, Dormmüller, said (paraphrasing): "The year 1933 brought a radical change; economic and political insecurity was replaced by stability. When the German economy showed an upswing, the personnel could be increased again. Men who had served the National Socialist cause, front fighters, and ex-soldiers, received preferential treatment." *Loc. cit.*, p. 41.

In 1937, special promotion or a second promotion was granted to the holders of honorary insignia of the party or to those who had declared their affiliation with it, in one way or another, prior to September 14, 1930. Four thousand

characteristically, National Socialism has respected the principle of managerial continuity.⁷⁴

The compensation of the mass of personnel has been reduced during the last decade. Previously the trend had been upward. A wage agreement of March 11, 1921 partly stabilized the situation but the general level rose until 1929. In 1931 a downward movement began, and wages were brought back in three steps to the 1926 level.⁷⁵ The following table shows the relation of recent wage levels to those that prevailed in 1928 and 1932.⁷⁶

HOURLY RATES OF WAGES FOR RAILWAY WORKERS IN *Reichspfennige*

	1928	1932	1936
Skilled	92.2	78.3	78.7
Semiskilled	76.2	65.3	67.5
Unskilled	73.8	63.7	64.4

At best, recent rates of compensation have had only a slight edge over those of the depression years.⁷⁷ Youth is served; full compensation is allowed at the age of twenty-one, not twenty-four, as formerly.⁷⁸ Wage scales are still fixed regionally for numerous operating areas. The scheme of compensa-

persons were affected by this order. Meanwhile, some recruiting was going ahead on a party basis; about 16,000 National Socialist front fighters were taken into the railway system. In addition, 15,000 party veterans, in the period between 1935 and 1937, were credited with five years' service, which would be reflected throughout their lives in compensation and in other advantages.

⁷⁴ The high officials of the railroad system, like those in the administrative services generally, are appointed and dismissed by the Führer. Although in principle this applies to all officials in the railway service, in practice it extends down to the lowest step in the highest range only, involving positions paying from 4,800 RM to 8,100 RM.

⁷⁵ Dorpmüller, *loc. cit.*, p. 43.

⁷⁶ Vaso Trivanovitch, *Economic Development under National Socialism* (National Industrial Conference Board, Inc., New York, 1937), p. 42.

⁷⁷ It was said that the Labor Front (*Reichsbetriebsgemeinschaft*) to collaborated in drafting the Service and Wage Order of May 1, 1934, which underlies the present wage structure. Georg Körner, "Aufbau und Organisation des deutschen Verkehrswesen", *Jahrbuch der nationalsozialistischen Wirtschaft*, herausgegeben von Dr. Otto Mönckmeier (Munich, 1937), pp. 428-9.

⁷⁸ Ziche, *loc. cit.*

tion abounds in bonuses, premiums, and special forms of increment.⁷⁹ In 1938, for example, it was reported that 57 per cent of all railway employees were receiving bonuses, premiums or the like.⁸⁰

Most of this, of course, is the mere continuation of the practices of an old and progressive state industry which had been developed in the context of German social legislation. The National Socialist régime, while contracting the proportion of railway workers who have civil service status, has conserved and extended certain elements of security.

Thus the impressive social services of the railway system have been maintained.⁸¹ In the field of social insurance the Reichsbahn participates in part in organizations which serve other phases of national administration; in part it maintains institutions of its own. The railway system itself carries disability and old-age insurance in behalf of its employees and for this purpose a new organization, the *Reichsbahnversicherungsanstalt*, has been developed on the basis of the coordination of the labor pension funds of the several *Länder*.⁸² The *Reichsbahndirektionen* carry accident insurance. Compulsory sickness insurance is carried in some twenty-five federated funds (*Reichsbahnbetriebskrankenkassen*). In 1934 the

⁷⁹ Kleinmann, "Die sozialen Leistungen der Deutschen Reichsbahn seit 1933", *Die Reichsbahn*, April 6, 1938, pp. 343 *et seq.*

⁸⁰ Foremen are so rewarded. Employees receive a loyalty premium at the end of twenty-five years of service; some 27,000 reach this point every year. In addition, seniority premiums are granted periodically: after sixteen years of service, 3 per cent of the basic wage; after twenty-one years, 4 per cent; after twenty-six years, 5 per cent. Cf. Kleinmann, "Die neue Dienst- und Lohnordnung der Deutschen Reichsbahn", *Die Reichsbahn*, May 9, 1934, pp. 465-6. Workers with children receive an addition to their basic wage of 6 per cent, with the further added sum of 10 RM weekly for the fifth child and every child thereafter. Ziche, *loc. cit.*, p. 901.

⁸¹ Kleinmann, "Die sozialen Leistungen der Deutschen Reichsbahn seit 1933".

⁸² This was accomplished primarily by the law of July 5, 1934, *RGBl* I, p. 577, supplemented by the ordinance of December 21, 1934, *RGBl* I, p. 1273, and the law of December 21, 1937, *RGBl* I, p. 1393. Cf. Kuhatscheck, "Die Reichsbahnversicherungsanstalt, die Reichsbahnbetriebskrankenkassen, die Angestellten-, Unfall- und Arbeitslosenversicherung bei der Deutschen Reichsbahn", *Archiv für Eisenbahnwesen*, November-December 1938, pp. 1468 *et seq.*

Reichsbahn contributed about 85 million RM to the various compulsory forms of social insurance.⁸³ The yearly contributions to voluntary insurance funds and other benefits amount to about 65 million RM.⁸⁴ Outdoor medical service is provided. The railway system, a world in itself, has long carried its panoply of varied social facilities.⁸⁵

In employee relations, the principle of *Betriebsgemeinschaft*—the harmonious collaboration of management and men—has been extended to public activities as well as to industry generally.⁸⁶ Its practical effect further blurs the distinction between the civil service and employees who are engaged on the basis of contract. The elaborate unions of the railway service are gone.⁸⁷ Militancy is impossible. It is unnecessary

⁸³ Dorpmüller, *loc. cit.*, p. 44. In addition, numerous voluntary and supplementary facilities are maintained, like the Sickness and Burial Funds for Railway Workers (*Kranken- und Sterbekasse*) and Sickness Benefits for National Railway Officials (*Reichsbahn-Krankenversicherung*).

⁸⁴ *Ibid.* In 1937 the Reichsbahn paid 133.7 million RM and the insured 131.3 million for social insurance. Kuhatschek, *loc. cit.*

⁸⁵ Over twenty recreation homes and ten homes for children are kept up by the railway system. In 1937 it owned 113,000 dwellings used by its employees and up to that year it had underwritten in behalf of building associations the financing of housing facilities for 66,500 families. The Reichsbahn was even providing annual scholarships for over five hundred gifted boys belonging to large families in its employ. Cf. Kleinmann, "Die sozialen Leistungen der Deutschen Reichsbahn seit 1933".

⁸⁶ The application to the railways was accomplished under the Act for the Regulation of National Labor in Public Administration and Undertakings, March 23, 1934, *RGBl* I, p. 220. Fritz Ermarth remarks: "... The aim of the National Socialist labor legislation is to 'reconcile' and 'harmonize' the interests of entrepreneurs and workers that were alienated from one another through the practices of liberalism and unfettered materialistic individualism (which appeared in its latest stage in the disguised form of Marxian 'collectivism')." *The New Germany: National Socialist Government in Theory and Practice* (Washington, 1936), p. 135.

⁸⁷ The unionization of railway workers began in 1884 in the *Verband Deutscher Eisenbahnhandwerker*, of Hirsch-Duncker tendency; the first socialist union appeared in 1896. Cf. the excellent history in Karl Winkler, "Die Gewerkschaftsbewegung im deutschen Eisenbahnpersonal", *Archiv für Eisenbahnwesen*, January–February, March–April, September–October 1926. The main socialist railway organization of the early Weimar period, *Reichsgewerkschaft deutscher Eisenbahnbeamten*, was partly discredited in the serious railway strike of 1922; indeed the general labor federation rebuked it because the

here to examine the nature of the supposedly compensatory scheme of trustees of labor and honor courts.⁸⁸ In its application to the railway personnel the new framework involved the elements of consultative "councils of trust" (*Vertrauensräte*) where there are twenty employees or more, regional councils in the main operating districts, and a council attached to the central administration. The grounds of dismissal are reviewable by labor courts.⁸⁹

strike was called while a wage negotiation was pending. Thereafter militancy declined, the rôle of the unions being mainly in collective bargaining, for which the autonomous nature of the system left considerable leeway. Unionization was strong but its structure was complex, being cut across partly by distinctions between civil servants and employees and partly by political tendencies. Cf. Baumann, *op. cit.*, p. 355; Winkler, *loc. cit.*, pp. 1121-8. In 1930 the division was roughly as follows:

Railway organizations (classified by tendency)	Top affiliations	Number of votes cast in elections for union councils
Socialist <i>Einheitsverband der Eisenbahner Deutschlands</i>	<i>Allgemeiner deutscher Beamten-Gewerkschafts- bund</i>	civil servants, 61,586 workers, 212,732
Christian <i>Gewerkschaft Deutscher Eisenbahner</i>	<i>Deutscher Beamtenbund Deutscher Gewerkschafts- bund</i>	civil servants, 63,271 workers, 60,034
Democratic (Hirsch-Duncker) <i>Allgemeiner Eisenbahner- Verband</i>	<i>Gewerkschaftsring Deutscher Arbeiter-, Angestellten-, und Beamtenverbände</i>	workers, 22,814
Neutral <i>Zentralgewerkschaftsbund Deutscher Reichsbahn- beamten</i>	<i>Deutscher Beamtenbund</i>	civil servants, 99,916
<i>Gewerkschaft der technischen Eisenbahnbeamten</i>	" "	15,566
<i>Gewerkschaft Deutscher Lokomotivführer</i>	Independent	53,966

⁸⁸ Cf. Nathan A. Pelcovits, "The Social Honor Courts of Nazi Germany", *POLITICAL SCIENCE QUARTERLY*, September 1938, vol. 53, pp. 350-70. On the pattern of labor relations and the Labor Front generally, cf. Helmut Egloff, "Gestaltung des Arbeitsverhältnisses", and Franz Mende, "Arbeitsfront und Sozialpolitik", *Jahrbuch der nationalsozialistischen Wirtschaft* (Munich, 1937), pp. 50 et seq., and pp. 87 et seq.; also on the formation of the Labor Front, Fritz Poetsch-Hefler, Carl-Hermann Ule and Carl Dernerde, "Vom Deutschen Staatsleben (vom 30. Januar bis 31. Dezember 1933)", *Jahrbuch des öffentlichen Rechts*, vol. 22 (Tübingen, 1935), pp. 164 et seq.

⁸⁹ In cases of dismissal, moreover, employees of the Reichsbahn who have served more than a year are entitled to four weeks' notice; if employed more

(4) *Administrative autonomy in the setting of National Socialism.* In concluding the survey of the organizational features of the German railway system, a word should be said regarding the place which the theory and practice of National Socialism hold for the autonomous administration of public enterprise. The régime, clearly, has had no wish to alienate its economic holdings; its protective nationalism, alone, would probably have precluded such a step even if its condition had not been that of a virtual state of war. It has been prepared to make proud parade of its railway system but likewise to subordinate it.⁹⁰ But the impressive fact has been that even so monopolistic and jealous a régime has seen administrative reasons for the retention of autonomous forms and procedures.⁹¹

than ten years, the period of notice is six weeks; and if more than fifteen years, three months; if more than twenty years, six months. Cf. Schrag, "Grundlegende Begriffe und Bestimmungen des Deutschen Arbeitsrechts unter besonderer Berücksichtigung der Verhältnisse bei der Deutschen Reichsbahn", *Die Reichsbahn*, June 1, 1938, pp. 563-70.

⁹⁰ Speaking at Nuremberg on December 8, 1935, on the occasion of the centennial of the first operation of a steam-driven train in Germany, Adolf Hitler paid tribute to national ownership in these terms: "We do not deny the tremendous achievement of capitalistic development of the past century, but we offer in the German railway system an impressive demonstration of the possibility of founding a model and unparalleled enterprise on a different economic basis. This realization is of immense value in that it teaches us to apply experiences and the conclusions thus gained in other directions also, not merely for the sake of doctrine but for considerations of a sober and physical nature." *New York Times*, December 9, 1935.

⁹¹ The comment of Ludwig von Köhler may be cited as typical: "The leadership principle and the coöperation of the National Socialist German Workers Party (NSDAP) are intimately woven into the fabric of every self-governing body. . . . National Socialism . . . stresses articulation of State and self-governing bodies and therefore restricts home rule. Nevertheless, it has considerably increased the number of self-administrative agencies in order to enable organically grown bodies to express an autonomous administrative will, provided that will corresponds to the laws and the aims of the national leadership. As examples of this administrative technique may be cited the foundation of the Unternehmen Reichsautobahnen, vesting it with autonomous legal personality of public law, or the creation of the Academy for German Law by the act of July 11, 1934 (*RGBl* I, p. 605)." *Grundlehren des Deutschen Verwaltungsrechts* (Stuttgart and Berlin, 1936), p. 114. Cf. also Ernst ForsthoFF, "Nationalsozialismus und Selbstverwaltung", *Deutsches Verwaltungsrecht* (Munich, 1937), p. 176; Otto Koellreutter, *Deutsches Verwaltungsrecht* (Berlin, 1936), p. 61. For an indication of a similar tendency in Italy to

This tendency may be traced in the consideration of finance and other phases of operations, to which attention will next be given.*

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continue to use semi-autonomous bodies, cf. G. Lowell Field, "Forms of Organization of Italian Public Undertakings", *Annals of Collective Economy*, Geneva, 1934, vol. 10, pp. 1-47.

* The second installment of this article will appear in a later issue of the *QUARTERLY*.—Ed.

AUTONOMOUS PUBLIC ENTERPRISE—THE
GERMAN RAILWAYS II *

FINANCES

ADMINISTRATIVE autonomy in the conduct of public enterprise has two aspects. One phase is directive, involving a decentralization of discretion and command. The other phase is procedural; it consists of the relaxation of numerous restrictions which apply to the ordinary operations of government. The full application of autonomy to public undertakings calls for a combination of both types, directive and procedural. The second, however, may exist without the first.⁹² When this is the case, true autonomy is lacking, but the results may be important and valuable. The purpose is flexibility and convenience, not the devolution of authority.

Procedural autonomy may relate to requirements in the fields of both personnel and finance. From the standpoint of the needs of public enterprise, the modification of routine in the latter regard is of outstanding importance. The fiscal procedures of modern states involve numerous restraints which reflect two quite different historical purposes. On the one hand, fiscal machinery was developed in the attempt to establish and to bulwark parliamentary control. An important phase was the requirement that no money might be drawn from the treasury except in accordance with law. This aspect of the power of the purse came relatively late, of course, being ante-

* The first installment of this article, dealing broadly with the organization of the railways in successive periods, appeared in the December 1939 issue of the *QUARTERLY*. The concluding installment will consider traffic and rates and the problem of the coordination of the several means of transport in relation to the railways.—Ed.

⁹² Illustratively, one may cite the majority of the government-owned corporations set up in the national government of the United States in recent years. Cf. John McDiarmid, *Government Corporations and Federal Funds*.

dated by the winning of the legislative right to authorize the imposition of taxes; but from the time of the revolution of 1688, the practice of specifying the objects and amounts of expenditures in terms of definite fiscal periods came to be understood as a corollary of representative government. Related to it was the further corollary that all receipts of government must be covered into the general treasury. Income and outgo were thus separated; revenue was governed by more or less permanent laws but the handling of appropriations was recurrent. Audit, meanwhile, was developed as a means of securing compliance with the legislative will.

But the financial formalities of present-day governments did not result solely from efforts to fortify the legislature. Many restraints, on the other hand, developed in the attempt to secure administrative integration. This inspiration pervaded budgetary reform in recent decades; it may be traced in the growing power of finance departments; it appeared in the rationalization of accounting and in the centralized procurement of supplies. The two motives of fiscal complication—legislative supremacy and executive integration—have sometimes been in conflict, but their cumulative joint effect is to subordinate the several parts of administration. The result is apt to be especially vexing to the economic undertakings of the state.

These observations give point to an examination of the finances of the German railway system. The preceding survey of the successive stages in the organization of the Reichsbahn has indicated that its directive autonomy has been curtailed. Such was the tendency from 1933 to 1937, even in the absence of formal changes in the law. The acts of 1937 and 1939 have confirmed the trend by placing the directive head of the system in the cabinet and by reducing the already diminished Board of Management to an advisory council. It would have been strange if this had not been the course of events in the treatment of so indispensable a service from which unusual sacrifices were expected by a totalitarian régime under conditions that approximated military mobilization.

The subordination of the managerial judgment of the Reichsbahn has not been complete, of course. Its sheer mass, not to

mention the distinctively technical problems in which it is involved, guarantees an irreducible degree of independence. In this it has been fortified by a tradition of competence. The continuity of leadership in the person of Julius Dorpmüller, who was its managing director before 1933 and who has remained its head, has been a token of subordination in major policy but has helped to maintain autonomy in fiscal procedure. The survival of the Reichsbahn as an entity must be read largely in its distinctive, self-contained, and relatively flexible financial arrangements.⁹³

a. *Budgetary Relationships.* Despite the overtone of the declaration in the constitution of 1919⁹⁴ that the railway system was to be "administered as an autonomous economic enterprise", the finances of the newly unified network were incorporated in the general budget of the Reich. This arrangement merely continued a relationship which had characterized the conduct of railways by the separate states. It must not be thought, of course, that the states had quite overlooked the peculiarly economic nature and needs of government-owned railroads.⁹⁵ Their budgets had contained special "railway sections", but in these, anticipated revenue and authorized expenditures had been set down, in the normal method of public finance, for a stated fiscal period, usually from April 1 to March 31.⁹⁶ Only in matters of expenditure could the budget

⁹³Cf. Theodor Kittel, "Das Reichsbahngesetz vom 4. Juli 1939", *Archiv für Eisenbahnwesen*, July-August 1939, pp. 821-2, for remarks on the legal implications of the changes wrought by the law of 1939. His comment perhaps overstrains a point of difference in suggesting that the Reichsbahn, though an economic entity and acting like a juristic person in many relationships, is no longer strictly a juristic entity.

⁹⁴Article 92 stated that "notwithstanding the inclusion of its budget and its accounts in the general budget and general accounts", the system was to be "responsible for its own expenditures including interest and amortization of the railroad debt and the accumulation of a railroad reserve fund." Cf. Gerhard Anschütz, *Die Verfassung des Deutschen Reichs vom 11. August 1919* (Berlin, 1929), p. 397.

⁹⁵O. Conrad, "Zur finanzwirtschaftlichen Selbständigkeit der Deutschen Reichsbahn", *Archiv für Eisenbahnwesen*, July-August 1936, pp. 725 et seq. What has been said of the states applied also to the conduct of the nationally owned railways in Alsace-Lorraine prior to 1918.

⁹⁶*Ibid.*, p. 727.

law speak authoritatively. The estimates of revenue were subject to many uncertainties. No organic relationship was established between outgo and income. Current surpluses flowed into the general treasury, from which deficits, if any occurred, were to be made up. Meanwhile the economy of the country was expanding. The railroads still held a *de facto* monopoly in transportation. With a rising income, therefore, granted a fair degree of administrative competence, the railroads could tolerate the rigidities of a bureaucratic budget.

Even in relatively prosperous times, however, there was criticism. Partial steps were taken toward autonomous financing. Prussia, definitely from 1882 on, segregated borrowing in behalf of its railways. Beginning in 1903, and further in 1910, Prussia provided for an equalization reserve which would cushion the general exchequer against fluctuations in railway income. The motive was partly the convenience of the treasury but the beginnings could be seen of an effort to protect railway managements against the grasping hands of finance ministers.⁹⁷ In the year before the World War, the Prussian state railways began to issue a yearly balance sheet and statement of profit or loss. This was significant, even though the underlying bookkeeping was still cameralistic and information was lacking on questions germane to these matters, such as cash on hand and the amount of inventories.

The fear of irresponsible government had been a factor in keeping the railroads within the frame of the budget. Socialists, for example, were anxious lest the government's possession of a lucrative property might make a Bismarck even more independent of legislative grants.⁹⁸ This suspicion colored

⁹⁷ *Ibid.*, pp. 733-5.

⁹⁸ August Bebel wrote: "Another question of the day was the nationalization of the railways, which had been planned by Bismarck. The Congress [at Gotha in 1876] declared in favor of nationalization, but against acquisition by the Empire, because such acquisition would serve only the interests of the aristocratic and militarist State; the revenue would be wasted on unproductive expenditure whereby the Empire would acquire further power—a power hostile to Democracy; and great sums of money belonging to the nation would fall into the hands of the market-riggers of the Bourse." *My Life* (London, 1912), p. 301. Cf., also, W. E. Walling and Harry Laidler, *State Socialism*, Pro

their attitude toward railway unification. In 1919 it merged with the notion that the railroads should serve economic needs and not be treated as a "milking cow".⁹⁹ In the proper fiscal framework, autonomous management might indeed be the best assurance that railroad earnings would be devoted to railway needs and thus directed to the benefit of shippers and passengers. But traditional scruples made the affirmation of autonomy in the Weimar constitution a hesitant declaration, while the immediate emergency prevented the realization of even the degree of administrative independence contemplated in the phrase "selbständiges wirtschaftliches Unternehmen".

The remedy was sought in surgery, but only after the worst of the crisis was over. The cessation of subsidies on November 15, 1923 carried the corollary of self-contained railroad finances. This ideal was embodied in the organization of the *Unternehmen Deutsche Reichsbahn*, established by law in February 1924. The Dawes Plan, which was applied to the German railroads by a statute later in the same year, emphasized the fiscal independence of the system, so far as the German government was concerned, while introducing considerable directive autonomy. The amendatory railroad law of 1930 eliminated foreign participation in the management but left the financial relationships of the Reichsbahn to the government substantially unchanged. Nor did the laws of 1937 and 1939 drop the principle of separate and internally flexible railroad finance.

What has changed has been the budgetary system of the Third Reich itself. In a parliamentary sense, the state budget hardly exists. No full budget has been published since 1934.¹⁰⁰ No figure relating to revenue from taxation has been divulged. Budgeting under National Socialism has consisted essentially of confidential and separate negotiations between the potent minister of finance, as an organ of the supreme will,

and *Con* (New York, 1917), p. xxix, quoting from H. Laufenberg in *Die neue Zeit* in 1913.

⁹⁹ Anschütz, *op. cit.*, quoting from committee proceedings.

¹⁰⁰ James Kerr Pollock, *The Government of Greater Germany* (New York, 1938), p. 114.

and the several ministers.¹⁰¹ This condition has eliminated much of the rigidity that attends parliamentary budget-making. From this standpoint, economic undertakings like the railroads might be handled on the same basis as other governmental activities. It is interesting, however, that the idea of separate and distinctive treatment of railroad finances is still maintained.

b. *Borrowing and the Debt Structure.* An economic enterprise such as the German railways must, in the course of its history, acquire, maintain, renew, and at times also extend an enormous and costly physical equipment. Apart from these long-run needs, it must cope with current irregularities. Debt can hardly be avoided. It is true that once such an undertaking has been substantially completed, assuming sustained earnings, a drastic scheme of reserves might enable it to keep abreast of technical advance without borrowing. This solution of the problem of capital debt may well be held as an ideal by the managers of public enterprises, but it is an ideal to be pursued cautiously. Unlike corporate private enterprise—which is not supposed ever to pay off the principal of the capital sums acquired by it through the sale of stock—public enterprise need not cherish a permanent debt as a lasting basis for dividends.¹⁰² But thoughtful directors of public undertakings are aware that an over-ambitious policy of debt retirement and of development on the basis of reserves accumulated from current income may sometimes unduly burden the present generation of consumers. The result may be more serious than a theoretical injustice, for the policy may discourage the promotional price-cutting which may be needed to reach the potential demand.

¹⁰¹ Vaso Trivanovitch, *Economic Development of Germany under National Socialism*, p. 140.

¹⁰² The remark in the text deliberately disregards the argument that the capital structures of public and of private enterprise should be maintained and paid for on the same basis—that of private enterprise—in order to facilitate comparisons. The fallacy of this point of view is that it unfairly narrows the grounds of appraisal. The comparison of public and private enterprise is not a matter merely of managerial and engineering skill; it is a question, at bottom, of two methods of obtaining capital.

When borrowing must be resorted to in behalf of public enterprise, the most interesting questions center in the problem of autonomous organization. Should the basis of credit be the property and earnings of the undertaking itself, or the combined resources and taxing power of the general government which is involved? And where should the authority to sanction borrowing be located? Many conflicting considerations are involved. When securities are issued on the credit solely of the enterprise itself, the rate of interest may be higher than with obligations of the general government. Such, indeed, is the normal expectation. But the situation may be reversed by reason of an abnormal political scene, or by a depression so general that it prostrates the ordinary bases of taxation, or the reversal may result from the sheer strength of a strategically placed, well-managed, and highly reputable public enterprise.¹⁰³ Even when equal or lower interest rates are not obtainable, furthermore, the arguments for autonomous management may seem to warrant self-directed and self-sustained financing. Against these arguments, however, arises a consideration to which the friends of public enterprise are likely to give ear: that control over new capital expenditure is a peculiarly effective point at which the direction and rate of expansion of any activity may be guided in behalf of an overall coördination of economic effort. At the very least, moreover, the borrowing requirements of the general government seem to justify some sort of defensive veto by it over borrowing by semi-independent public agencies. The interplay of these factors has been illustrated, though not always acknowledged, in the history of the German railways since unification. But the lessons have been blurred by truly extraordinary circumstances.

The disposition of the railway debts of the *Länder*, existing prior to unification, first claims consideration. It is funda-

¹⁰³ In the United States, especially, extensive experience with revenue bonds, so-called, is perhaps too recent to be conclusive either way, even on the question of relative interest rates. Cf. Laurence S. Knappen, *Revenue Bonds and the Investor* (New York, 1939); also, John F. Fowler, *Revenue Bonds* (New York, 1939).

mental to note that these obligations were assumed by the Reich itself, not by the new railway system. Their assumption was a phase of the indemnification of the states.¹⁰⁴ So far as the former state debts were taken over by the Reich under these conditions, they were destined to be virtually liquidated later along with the debt of the Reich itself.¹⁰⁵ Meanwhile the *Länder* were claimants for the amounts by which in each case the total indemnification exceeded the transferred state railway debt. As the situation stood in April 1924, out of a total purchase price of 39,063,378,081 paper marks, a balance of 8,633,450,766 was owing to the *Länder*.¹⁰⁶ It would have been contrary to the salient purposes of the Dawes Plan in 1924 to saddle prior debts and claims on the railway system, which the Reich was then yielding as a concession. As a gesture of compromise to the *Länder*, it was promised that they might share in dividends through the assignment of one fourth of the shares of common stock, amounting to 3.25 million gold marks. But the transfer of stock (which indeed was never issued) did not take place¹⁰⁷ nor were dividends paid to the *Länder* in

¹⁰⁴ Because of varied financial situations in the several *Länder*, the arrangements for indemnification were complicated by optional alternatives, set forth in the state treaty of acquisition concluded on March 31, 1920 (*RGBl.*, p. 773). Cf. Heinrich Triepel, *Quellensammlung zum Deutschen Reichsstaatsrecht* (3rd edition, Tübingen, 1922), pp. 112-20. The assumption of the state debts in this connection was further implemented by a law of July 29, 1922 (*RGBl.* II, p. 693), concerning the execution of the state treaty regarding the transfer of the state railways to the Reich.

¹⁰⁵ The law of July 16, 1925 (*RGBl.* I, p. 137) converted the debt of 74 billion RM—of which 15,256,836,957 RM were obligations taken over by the Reich in connection with railway unification—into a Conversion Debt (*Anleiheablösungsschuld*), the base and minimum rate being 2½ per cent. Cf. *Denkschrift über die Ablösung der Markanleihen des Reichs*, Reichstag, IV. Wahlperiode, 1928, No. 474.

¹⁰⁶ In the case of Prussia, the purchase price had been 29,059,883,610 (paper marks), the balance to be paid was 4,885,821,886; in the case of Bavaria the balance was 560,342,746, against a purchase price of 3,687,619,158. The proportion of the balance to the original sum was greater in the case of five of the six other "railway states". Adolf Sarter and Theodor Kittel, *Die neue deutsche Reichsbahn-Gesellschaft*, pp. 36, 98.

¹⁰⁷ Wilhelm Utermann, "Die öffentlichen Lasten der Reichsbahn", *Wirtschaftsdienst*, Sept. 18, 1931, vol. 16 (38), p. 1596.

question. Numerous complaints were heard.¹⁰⁸ At last, following the subordination of the *Länder* in 1934, a law of May 14, 1935 expressly extinguished any claims that might continue on the basis of the original treaty for the acquisition of the state railway networks.¹⁰⁹ Thus ended a dispute which had simmered for a decade.¹¹⁰

Although freedom was won from various historic obligations, the national system was at times sorely beset. During the early period of unified operation, the depleted and burdened network incurred repeated deficits; in this its course paralleled that of the general government on which it was dependent.¹¹¹ During inflation, the relative inflexibility of rates rendered the railways especially vulnerable. National subsidies ceased on November 15, 1923. Currency stabilization, however, had not yet become an effective fact and its inauguration was attended by strains of a new kind. The immediate need for cash in the railway system was met by emergency money, while the purchases which were absolutely necessary were financed by short-term promissory notes discounted by the Reichsbank. These short-term obligations were taken up after the reorganized railways began to operate as the *Unternehmen Deutsche Reichsbahn*.¹¹²

¹⁰⁸ Cf., for example, Saxony's claim of 377 million RM, voiced in 1929. *Stenographische Berichte, Verhandlungen des Reichstags*, vol. 424, p. 1228(C). Cf., also, *ibid.*, vol. 425, p. 2635(C).

¹⁰⁹ *RGBl.* II, p. 437, section 2 stipulating: "No further payments will be made by the Reich by virtue of the state treaty, the law executing the treaty of July 29, 1922 (*RGBl.* II, p. 693), and the agreements entered into in connection therewith."

¹¹⁰ If these relations seemed high-handed, the wrong was offset by two considerations during the early and middle course of federalism under the Weimar constitution. First, the possession of the railways might have crippled the *Länder* in the days of deficits and the later days of reparations. Second, the ultimate fairness of any settlement between the central and local governments must be considered in terms of the totality of inter-governmental fiscal relations within Germany. Cf. Paul H. Wueller, *The Integration of the German Tax System* (New York, 1933).

¹¹¹ James W. Angell remarks: "In the five years from 1919 to 1923 the Government's receipts, measured in gold values, never came near equalling its expenditures, and for the period as a whole averaged only about 25 per cent of them." *The Recovery of Germany*, p. 29.

¹¹² Julius Dorpmüller, "Die Deutsche Reichseisenbahn 1918-1936", *Deut-*

The vicarious liquidation of the railway debt during inflation was cited as a partial justification for the task imposed on the Reichsbahn by the Dawes Plan, incorporated in the law of August 30, 1924. The railroads, it will be recalled, were mortgaged to reparations, and special bonds to the amount of 11 billion gold marks were rendered by the Reichsbahn to the Trustee for the German Railway Bonds. Interest was to be paid at the rate of five per cent annually; after the fourth year from the commencement of the plan a sinking fund of one per cent per annum on the total amount of the bonds issued, whether redeemed or unredeemed, plus the interest amount saved by amortization, was set aside for their redemption.¹¹³ When this became fully effective in 1927-28, it amounted to 660 million RM yearly, which was 26.4 per cent of the standard annuity due from Germany under the Dawes Plan.¹¹⁴ In addition, proceeds from a transport tax—which even before unification had become a feature of German public finance—were to be turned over to the Agent General for Reparations up to the amount (after 1926) of 290 million RM annually.¹¹⁵

ches Institut für Bankwissenschaft und Bankwesen, Probleme des Deutschen Wirtschaftslebens, p. 36.

¹¹³ Par. 8 of the by-laws; cf. Gerhard Lassar, "Reichseigene Verwaltung unter der Weimarer Verfassung", *Jahrbuch des öffentlichen Rechts der Gegenwart*, vol. XIV (1926), pp. 187-8.

¹¹⁴ Angell, *op. cit.*, p. 68.

¹¹⁵ Under a law of April 8, 1917, the transport tax replaced a then existing stamp tax. Under the Dawes Plan, the yield of the tax above 290 million RM was to go to the Reich. In 1925 the total yield was 300.7 million RM; in 1926, 271.6; in 1927, 309.7; in 1928, 318.9; and in 1929, 325.3. Cf. *Wirtschaftsführung und Finanzwesen der Deutschen Reichsbahn* (Berlin, 1934), p. 71. After 1930, under the Young Plan, the whole yield was retained by the Reich. The rates of the tax (as amended October 7, 1929) were: freight, 7 per cent; baggage, 12 per cent; third class passenger traffic, 11 per cent; second class, 14 per cent; first class, 16 per cent. In addition to the transport tax (in which the railway system was a conduit), the Reichsbahn has been subject to a number of other taxes; namely, a turnover tax, a tax on industrial enterprises, national and state stamp taxes, church taxes, school taxes, poor relief, dike taxes, taxes of communities on real property and buildings, and the automobile tax. It has been exempt from the corporation tax, the capital tax, taxes of the *Länder* on real estate and buildings, and the tax on trading profits. Payments on the foregoing amounted to about 18 million RM in 1929, and 23.8 million in 1937. Cf. Hans Baumann, *Deutsches Verkehrswesen*, pp.

The payments on the mortgage bonds and from the tax together were presumed to make the contribution of the railroad system to reparations 38 per cent of Germany's payments in a standard year under the Dawes Plan.¹¹⁶ The new bonded obligation of 11 million RM could be compared with the aggregate pre-war railroad debt in Germany of 11.8 billion marks, which in terms of 1928-29 values might be considered equal to 16.5 million marks.¹¹⁷

In addition to the unique external obligation represented by the mortgage bonds, which had not provided capital in any sense, the law of August 30, 1924 introduced two features which are usual enough in corporate finance but which were rendered novel by the frame in which they were set. One was the arbitrary creation of a body of common stock; the other was the authorization of preferred shares. Common stock amounting to 13 billion RM was assigned to the Reich; if it chose it might transfer ownership of part to the *Länder*. In practice, the stock remained a bookkeeping fiction.¹¹⁸ No part of it has passed to the *Länder*; no effort has been made to treat payments by the railroads into the general treasury as dividends on this stock. The common shares, therefore, remained an inert symbol of semi-independent status under the

153-4, and *Archiv für Eisenbahnwesen*, 1938, p. 898. For an invidious comparison, offered in the sitting of February 21, 1929, to show the relative tax burdens of privately and publicly owned railways, cf. *Stenographische Berichte, Verhandlungen des Reichstags*, vol. 424, p. 1247(C). It is unnecessary to point out that any such comparison must take account of the full burden of public responsibility, which may be in many forms. Taxes are included in working expenses.

¹¹⁶ Angell, *op. cit.*, p. 68.

¹¹⁷ Angell (*op. cit.*, p. 68), citing *Die Deutschen Eisenbahnen, 1910-1920* (a publication of the German ministry of transport in 1923).

¹¹⁸ Napp-Zinn, "Die Deutsche Reichsbahn-Gesellschaft", *Schriften des Vereins für Sozialpolitik*, vol. 176, part 2, pp. 355-7. In 1924, the value of the concession by the Reich to the *Reichsbahn-Gesellschaft*, which was to run until 1964, was valued at 24.5 billion marks, which, however arbitrary some of its features may necessarily have been, was probably a fair valuation. It corresponded to the sums of 11 billions of reparation bonds, 13 billions of common stock, and 500 millions of preferred shares which were to go to the Reich without payment.

ownership of the Reich, until the shares themselves were eliminated by the law of February 10, 1937.

The preferred shares were intended to be a dynamic element in the new capital structure. Their original purpose was threefold: they were to provide for the needs of the railway system as they arose; private investors might thereby participate in oversight; incidentally, by permitting the Reich to share in the first issue, it was thought that the payment of the Reich's second installment under the Dawes Plan would be facilitated. The sale of two billion RM of preferred shares was authorized. They were transferable by delivery; they carried the claim to a cumulative preferred dividend; and they carried the further right to repayment of the principal on the termination of the concession.¹¹⁹ Originally there was no guarantee of dividends by the Reich itself. A few years after the establishment of the scheme, however, the Reich guaranteed a seven per cent dividend. In partial return, it assumed the right to appoint the representatives, if any, of the preferred shareholders, acting in this matter through the president of the Court of Audit.¹²⁰ If redemption was not possible by December 31, 1964, the concession was to be prolonged until redemption was effected, unless the Reich placed the necessary funds at the disposal of the *Reichsbahn-Gesellschaft*. One fourth of the preferred shares were allocated to the general government. This condition was signalized in 1925 by the issuance to the government, without payment by it, of 500 million preferred shares.

It has been remarked that the preferred shares made possible the participation of private investors in the direction of the Reichsbahn. For every block of 500 million RM of preferred shares, one representative of the shareholders might be chosen, who would replace one of the government representatives on the Board of Management. This stipulation echoed some of

¹¹⁹ Law of August 30, 1924, par. 5, sec. 1, sent. 2, and secs. 4 and 25 of the by-laws (*Gesellschaftssatzung*)—annex to par. 1, sec. 2, of the law. Cf. Sarter and Kittel, *op. cit.*, p. 95.

¹²⁰ Theodor Kittel, "Die Grundgedanken der neuen Reichsbahn-Gesetzgebung", *Archiv für Eisenbahnwesen*, May-June 1937, p. 266. Private purchasers of preferred shares hold only certificates; the shares are deposited in the Reichsbank.

the criticisms of public enterprise made by the railroad experts who advised the Dawes Committee.¹²¹ In Germany it fell in with the familiar pattern of mixed enterprise, to which it bore a strong resemblance.¹²² But in practice direct participation by investors was not realized. In the first place, there was a tendency to avoid private sale. In addition to the 500 million RM worth gratuitously given to the Reich, 124 millions were taken up by it later in 1925 and 107 millions in 1926. For public sale, 150 millions were authorized in 1926 and 225 millions in 1928. Of the last mentioned amount, however, 25 million RM remained unissued. In the second place, it became a requirement that the president of the Court of Audit must make selections in the name of the holders of preferred shares. Of the two billion RM of preferred shares (designed since 1930 as Group A) permitted by the law of 1924, a total of only 1,081 millions has been issued—all before 1930. These so-called shares are in fact certificates of indebtedness rather than stock. In 1937 they constituted a little over 42 per cent of the indebtedness of the Reichsbahn.

The law of 1930 which gave effect to the Young Plan cancelled the reparation bonds of the Reichsbahn and eliminated foreign participation in its management. In place of the interest and sinking fund payments which the bonds had entailed, and the share of the transport tax also exacted, the new arrangement substituted a single annual charge (called a tax) of 660 million RM, to be paid for thirty-seven years. Only wages might have priority over this obligation, payment of which was also guaranteed by the Reich itself. At the same time, greater borrowing facilities were given.

¹²¹ In order to encourage the participation of private investors as a permanent element in management—an ideal envisaged by the advisers of the Dawes Plan—it was provided that if preferred shares were retired before 1949 the holders were entitled to a premium of 20-10 per cent.

¹²² Cf. Richard Passow, *Die gemischt privaten und öffentlichen Unternehmungen auf dem Gebiete der Elektrizitäts- und Gasversorgung und des Strassenbahnwesens* (2nd edition, Jena, 1923); Fritz Terhalle, "Die gemischtwirtschaftliche Unternehmung", *Moderne Organisationsformen der öffentlichen Unternehmung*, pp. 325-80, part 1, vol. 176 of *Schriften des Vereins für Sozialpolitik*.

Despite the fact that an additional issue of 2 billion RM of preferred shares (Group B) was authorized, the subsequent needs of the railroads were met partly by a series of long-term and middle-term obligations, partly by a mounting body of current credit, partly by sheer postponement of desirable replacements. In 1930 the Reichsbahn shared to the extent of 253 million RM (after a discount of 42 million RM had been deducted) in the international $5\frac{1}{2}$ per cent loan arranged in behalf of Germany as a phase of the Young Plan negotiations. Here the basis of credit was that of the general government, not the railroad system. The Reichsbahn's indebtedness rapidly mounted in connection with the attempt to lessen unemployment by increasing orders for supplies and the like. In 1930, at the request of the government, the railway system issued certificates at 6 per cent to the amount of 150 million RM. When these became due in 1935, they were converted into a six-year loan at $4\frac{1}{2}$ per cent. In 1931, again primarily for the relief of unemployment, a $4\frac{1}{2}$ per cent loan was arranged, payable in yearly installments to 1941, which yielded the Reichsbahn 263 million RM.¹²³ In this case the government by presidential ordinance not only offered the lure of tax exemption but also allowed persons liable to prosecution for tax evasion to win immunity by purchasing railroad bonds in accordance with ratios based upon the degree of their delinquency. Thereafter, so far as the railroads borrowed at all, recourse was had to relatively onerous short-term financing. A presidential ordinance of March 18, 1933 sought to facilitate matters by providing that "securities issued by the *Deutsche Reichsbahn-Gesellschaft* or certificates covering such securities are admitted to every exchange for trading purposes."¹²⁴ Some of the financing was accomplished through the *Deutsche Verkehrs-Kredit-Bank AG* (a virtual subsidiary of the railroad system, founded for another purpose in 1923),

¹²³ The ordinance of September 19, 1931, part 3, relating to "the granting of tax-amnesty through the acquisition of tax-free Reichsbahn loan 1931", *RGBl* I, pp. 503 *et seq.* This extraordinary bit of law-making was based on Article 48 of the constitution.

¹²⁴ *RGBl* I, p. 109.

which now launched two subsidiaries, *The Reichsbahn-Beschaffungs-GmbH* and the *Reichsautobahnen-Bedarfs-GmbH*.¹²⁵ Drafts drawn on these institutions by concerns which supplied materials to the railroads or the express highways were rediscounted by the Reichsbank. The aggregate obligations of the Reichsbahn, which amounted to less than two billion RM in 1932, rose to 2,900 million RM in 1935.¹²⁶ The fact that the total had dropped to 2,525.1 million RM in 1937 was not so much a token of the cessation of need for money as a sign of physical neglect of the hard-driven railway system.¹²⁷

It is not that the power to borrow is lacking under the present provisions of law. The enactment of July 4, 1939¹²⁸ has already been mentioned as the capstone of railway legislation. It was not less noteworthy because its chief rôle was to perfect provisions that had already been introduced, especially by the law of 1937. Here it is enough to summarize its main features so far as they bear on the possibility of borrowing by the Reichsbahn. In recognizing the railway system as a "separate property" (*Sondervermögen*), the law stipulates that this property is not liable for other obligations of the Reich and that, conversely, the Reich is not liable for obligations incurred by the Reichsbahn in excess of its worth (*Reichseisenbahnvermögen*). Under paragraph 8 the railway system is

¹²⁵ These institutions, among others, will be further described in a survey of the ramifications of the Reichsbahn in the third installment of this article, to appear in a later issue of the *QUARTERLY*.

¹²⁶ E. Ziche, "Die Leistungen der Deutschen Reichsbahn nach dem Geschäftsbericht 1936", *Archiv für Eisenbahnwesen*, September-October 1937, p. 1064.

¹²⁷ A note in the supplement to the weekly report of the *Institut für Konjunkturforschung* for September 22, 1938 listed the "new capital investments of the Reichsbahn for a number of years, as follows: 1928, 302.1 million RM; 1932, 50.2; 1933, 165.1; 1934, 252.9; 1935, 182.4; 1936, 173.1; 1937, 260.1. It was ironic that in 1936 the Reichsbahn was lending its credit for the development of the express highways. This aspect will be dealt with in a discussion of coordination in transport in the third installment of this article. The *Geschäftsbericht* of the Reichsbahn for 1938 twice stressed the necessity of renewal of rolling stock. "It will be necessary to have recourse to the capital market in order to replenish materials."

¹²⁸ *RGBl* I, p. 1205.

authorized to take up loans. Credits may be secured either through the issuance of debentures (*Schuldverschreibungen*) or railway treasury certificates (*Schatzanweisungen*), through the sale of bills of exchange, or the raising of loans, the indebtedness being evidenced by certificates. In the case of the first two credit instruments mentioned, the consent of the minister of finance is necessary. Nor does the power expressly given to him stop there. He must be consulted about the investment of liquid assets and, according to the ordinance¹²⁹ executing the law, his approval must be obtained for various unusual transactions, including the acquisition of other railroads by the Reichsbahn, and the creation or acquisition of, or participation in, other undertakings if such undertakings involve an investment of over one million RM.

In practice the Reichsbahn has been on thin rations. It has not been a matter of wonder, of course, that, after a brief spurt of purchasing and rebuilding (partly as a phase of a work program aimed at unemployment), long-run requirements were postponed during recent years and replacements neglected even to the point of danger. The announcement in the spring of 1939 of an active, almost hectic, program for the purchase of equipment was hardly an act of prevision; rather, it was an effort to ward off a crisis. In a sense it was too late, for the cognate industries were hardly in a position to furnish, with the speed and in the volume that unusual needs now made imperative, the 6,000 locomotives, 112,000 freight cars, 10,000 passenger cars, and 17,300 motor trucks and carriers, which were to be acquired in the course of four years.¹³⁰ In November 1939, announcement was made of the consummation of

¹²⁹ July 5, 1939, *RGBl* I, p. 1213.

¹³⁰ A summary by the Transportation Division of the Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce (based on reports from the office of the commercial attaché in Berlin) stated: "The need for this equipment is apparent when one considers that in the autumn of 1938, when the volume of German railway transportation exceeded that of 1929 by 10 per cent, the Reichsbahn had 4,000 locomotives and 80,000 freight cars less in operation than in 1929." *Foreign Railway News*, December 20, 1939, vol. 15, special issue, p. 9. Cf., also, *Halbjahrsberichte zur Wirtschaftslage, Schriften des Instituts für Konjunkturforschung*, 1939/40, Heft 1, May 26, 1939.

a railway loan of 500 million RM—the first major episode in borrowing by either government or railways after the outbreak of actual hostilities in the new general war.¹³¹ For the condition that must be repaired, if that is presently possible, the Reichsbahn is hardly to blame. Nor does the ideal of autonomous provision of capital stand indicted because, in a frame so extraordinary, it failed the magnificent property that it was to serve. Clearly, such an ideal works no magic.

The nature of the financial structure of the Reichsbahn may be summarized in conclusion by two tabulations which show, respectively, its liabilities (Table A) and its assets (Table B) as of December 31, 1938.¹³²

c. *Income, Profit and Loss, and the Nature of Contributions to the General Treasury.* The law of August 30, 1924 required that the incorporated railway system present annually a balance sheet, a statement of income, and a statement of profit or loss. The practice has continued. Even in times of relative candor, no doubt, such statements are apt to contain some cryptic features.¹³³ Neither profit nor insolvency is simple. It would be strange if the statements from the Reichsbahn in recent years did not present points of difficulty.¹³⁴

Having put its house in order in 1923-24, the Reichsbahn showed operating profits in the business years from 1925 to

¹³¹ The correspondent of *The New York Times*, O. D. Tolischus, in the issue of November 3, 1939, indicated that, despite the dedication of the loan to railway needs, it might be used in part to "consolidate" the government's pressing short-term credits.

¹³² "Geschäftsbericht der Deutschen Reichsbahn, Jan. 1-Dec. 31, 1938", *Die Reichsbahn*, May 17-24, 1939.

¹³³ Angell remarked in 1929: "In ordinary German business practice the published balance sheet is regarded as being just as appropriate a field for the exercise of executive policy as any other part of the company's activities. The management submits only what it thinks is proper for the stockholders and the general public to know, and its presentation often has little to do with the real state of the facts. This is not regarded as an immoral deception; it is the customary convention, and dates back to the origins of incorporated business itself in Germany." *The Recovery of Germany*, p. 232.

¹³⁴ An explanation of the make-up of the profit and loss statement, etc., of the Reichsbahn, as matters stood a few years ago, is available in *Wirtschaftsführung und Finanzwesen der Deutschen Reichsbahn* (published by the management, Berlin, 1934).

TABLE A

LIABILITIES OF THE REICHSBAHN

(as of December 31, 1938—in Reichsmarks)

CAPITAL STOCK (<i>Eigenkapital</i>) ^a	18,900,000,000.00	
ADJUSTED VALUE OF PLANT, etc.	13,336,677,173.17	
PREFERRED SHARES ^b		
Authorized	1,106,000,000.00	
Unissued	25,000,000.00	
RESERVES	1,081,000,000.00	
SPECIAL RESERVES	161,580,000.00	
Statutory Reserve ^c	386,313,799.23	
For the redemption of preferred shares ..	144,000,000.00	530,313,799.23
LOANS		
International 5½% loan of the German Reich of 1930	142,537,993.72	
4½% tax-exempt railway loan of 1931 ^d ..	157,626,200.00	
4½% railway treasury certificates, 1935 ^e ..	150,000,000.00	
4½% railway treasury certificates, 1936 ^f ..	500,000,000.00	
Credits for construction work	492,677,700.08	
Assumption of debt of former Austrian state	360,534,051.96	1,803,375,945.76
OTHER OBLIGATIONS	514,748,733.30	
ACCOUNTS IN PROCESS OF SETTLEMENT (see contra) ..	424,261,527.87	
GUARANTIES ^g	90,683,429.89	
BALANCE CARRIED FORWARD TO NEXT FISCAL YEAR	11,459,628.85	
		36,763,416,808.18

^a When the Reichsbahn was created a "separate property" of the Reich, its capital stock was valued at 17 billion RM. In 1938 the capital stock was increased by 1.9 billion, representing additions for the Austrian railway net (1.2 billion) and that of the Sudeten (0.7 billion).

^b Preferred shares were issued as follows:

(1) to the Reich in 1925, 500 million GM at 7% Series I (no counter-value received), and 124 million GM at 7% Series II; in 1926, 107 million GM at 7% Series III.

(The Reich has disposed of fairly large amounts of these issues to public and private insurance companies, subject to the proviso that they must not be resold to third parties.)

(2) for sale to the public in 1926, 150 million GM Series IV; in 1928, 225 million GM Series V (of Series V, 25 million still unused).

^c Statutory Reserve: two per cent of gross receipts from operation are annually paid into this fund, the practice having been laid down originally by the law of August 30, 1924, par. 25, sec. 2. In accordance with par. 13, sec. 1, of the law of July 4, 1939, it is an equalization fund which purports to meet any falling off in the operating income of the Reichsbahn.

^d Due September 30, 1941.

^e Due September 1, 1941.

^f Due January 2, 1944. Of the amount raised, 400 million RM went to the Reichsbahn, for the development of express highways.

^g For the financing of the housing program.

TABLE B

ASSETS OF THE REICHSBAHN

(as of December 31, 1938—in Reichsmarks)

WAY, STRUCTURES AND EQUIPMENT as of December 31, 1937	29,555,310,601.71	
ADDITIONS and BETTERMENTS during 1938 ^a ..	5,149,004,565.45	34,704,315,167.16
INVESTMENTS		26,800,000.00
INVENTORIES		218,956,934.72
CURRENT ASSETS		
Cash	26,705,952.06	
Bank balances	314,340,820.02	
Checks in course of collection	26,861,233.02	
Securities	4,274,012.46	
Drafts	237,867,681.65	
Traffic balances receivable	15,220,585.68	
Current debtors	219,108,715.65	844,379,000.54
DEFERRED ASSETS against Reichsbahnautobahnen ..		
Claim arising out of issuance of 4½% Reichsbahn treasury certificates of 1936 ..	400,000,000.00	
Other claims	50,000,000.00	450,000,000.00
OTHER DEFERRED ASSETS ^b		95,023,397.26
ACCOUNTS IN PROCESS OF SETTLEMENT (see contra) ..		423,942,308.50
		36,763,416,808.18

^a During 1938, in addition to the railways of Austria and the Sudeten, the Reichsbahn acquired the Lübeck-Büchener Railway, the Brunswick State Railway, and the local railway in Munich.

^b To a large extent, investments in the *Mittlere-Isar AG* and *Walchenseewerk AG*—both for the production of power.

1929.¹⁸⁵ In 1930, the earnings, which had been 5.4 billion RM in 1929, fell to 4.6; they were 3.8 in 1931 and 2.9 in 1932. The recession of income was checked in 1933, but the operating coefficient was 104.66, yielding an operating deficit of 136 millions. The coefficient dropped to 99.28 in the business year 1934, to 95.75 in 1935, and to 88.16 in 1936. It was 90.6 in

¹⁸⁵ Dormmüller lists the operating profits (after deducting reparation payments, which increased as the Dawes Plan came into full operation), as follows: 1925, 361.5 million RM; 1926, 285.9; 1927, 290; 1928, 206.5; 1929, 201.0. In 1929 the operating coefficient was 83.93. "Die Deutsche Reichsbahn 1918-1936", p. 37.

1937. Meanwhile gross receipts had risen from 2.9 billion RM in 1932 to 4.4 billion RM in 1937, a jump of 50 per cent, but far short of the increase in the physical volume of business.¹³⁶ During these years of recovery, earnings could be claimed—24 million RM in 1934, and 152.2 million RM in 1935—but only by dint of drawing on reserves to the amount of 127 million RM and 26.5 million RM in these two years, respectively. The earnings were 471.8 million RM in 1936, 295.3 in 1937, and 252.1 in 1938.

In very recent years contributions to the general treasury have been governed by a formula anticipated under the law of 1937 and perfected in the law of July 4, 1939. Its basis was empirical; it generalized upon a practical judgment regarding the normal revenue of the Reichsbahn. Proceeding on the assumption that a total operating income of 4.6 billion RM might ordinarily be expected, after the absorption of the Austrian, Sudeten and Memel lines, the law of 1939 provided that 3 per cent of this amount—and in no case less than 100 million RM annually—should be paid to the Reich. This was to be treated as an operating expense. In addition, it was provided that the contribution should be increased, or decreased, by 10 per cent of the amount by which the total income exceeded, or fell below, the stated level of 4.6 billion RM. Something like this formula was invoked in 1937 and 1938. In the latter year 3 per cent was paid on the first 4 billion RM; 9 per cent on the excess.

The setting for these contributions is shown in the accompanying tabular summary of the operating account in 1938 (Table C). The total operating income was 5,133,519,589 RM. A payment to the national treasury of 120 million RM was listed as an operating expense; it represented a payment of 3 per cent on 4 billion of revenue. Earnings from operations were set down as 252,070,667 RM. From this sum it was necessary to defray charges in respect of dividends and interest, to provide reserves, and also to make an additional payment to the general treasury. The distribution of the

¹³⁶ The reasons for the discrepancy will be examined in considering traffic and rates in the concluding installment of this article.

TABLE C
OPERATING ACCOUNT OF THE REICHSBAHN FOR THE YEAR ENDED
DECEMBER 31, 1938
(expressed in Reichsmarks)

REVENUE		
Passenger and baggage traffic	1,432,321,370.33	
Freight traffic	3,355,536,254.85	
Incidental	345,661,964.57	
		5,133,519,589.75
EXPENDITURE		
TRANSPORTATION		
Station and terminal service	1,462,087,232.87	
Locomotive service	806,994,376.72	
Train service	293,748,226.17	
Track watching service	123,960,538.88	
		2,686,790,374.64
MAINTENANCE		
Way and structures	670,101,710.33	
Equipment	569,047,277.79	
		1,239,148,988.12
RENEWALS		
Way and structures	575,417,420.00	
Equipment	260,092,140.00	
		835,509,560.00
PAYMENT TO THE NATIONAL TREASURY		120,000,000.00
EARNINGS FROM OPERATIONS		252,070,666.99

"earnings" for these and certain other purposes is shown in Table D. The amount there listed as the "additional payment to the national treasury"—73,385,337 RM—was calculated as 9 per cent of 815,392,642 RM, the latter being the excess within the Old Reich of operating income above 4 billion RM.

In connection with the problem of payments into the general treasury, note should be taken of a few estimates regarding the contributions made by the Reichsbahn to the Reich or on its behalf since 1924. These payments are sometimes termed "political". One phase has concerned reparations.¹³⁷ A

¹³⁷ Reparation payments ceased in practice in June 1931, when a moratorium was arranged. At Lausanne in 1932 it was agreed that Germany should be allowed to settle finally for 3 billion RM bonds delivered to the Bank for International Settlements. These were to pay five per cent interest and a one per cent sinking fund charge. They were not to be negotiated for at least three years, in order to allow the general situation and Germany's condition in particular to improve, and then they were not to be sold under 90 unless

commentator, writing in 1938, estimated that the total participation of the railroad system in reparation payments had amounted to 5.6 billion RM.¹³⁸ Of this aggregate, 4.5 billion RM had been paid directly under the schemes of 1924 and 1930; 1.1 billions had been contributed indirectly through the transport tax. In view of the extent to which reparations were also to be met from the budget of the government proper, it was difficult, in the period from 1925 to 1931, to separate contributions which went to reparations from those which served general governmental purposes.

The commentator who has been cited estimated that apart from reparations the transport taxes had yielded 5 billion RM in the period down to 1936, relieving the general treasury to that extent.¹³⁹ During the period of depression after 1930 the deficits of the Reichsbahn precluded contributions; the management congratulated itself that it had been possible to avoid drawing on the general treasury.¹⁴⁰ As seen by the management, "political contributions" have a broad connotation. Thus a responsible spokesman of the railroad system asserted that in 1935 its "political" payments amounted to 500 million RM, or 13.9 per cent of the total operating income

the Bank, in its judgment, decided that the state of German economy warranted this step. The principal sum was the equivalent of \$714,286,000, less than two annuities under the Young Plan. Cf. Mildred S. Wertheimer, "The Lausanne Reparation Settlement", *Foreign Policy Reports* (November 23, 1932), vol. 8, no. 19. The amount of the proposed final settlement was 2.2 per cent of the Allied demands in 1921. It will be recalled that the Dawes Plan, without fixing a total sum (though theoretically affirming the original demands), called for a standard annuity of 2.5 billion gold marks—the equivalent of \$595,000,000. The importance of the Young Plan lay in the adjustment and fixation of the total to be taken—32 billion gold marks, the equivalent of \$7,600,000,000, involving annuities of 1.9 billion gold marks over a period of thirty-seven years. As for the Lausanne agreement, only the transitional measures constituting part 2 became effective; the agreement itself was not ratified. Cf. Bank for International Settlements, *Fifth Annual Report*, April 1, 1934—March 31, 1935 (Basle, May 1935), pp. 61-2.

¹³⁸ Ministerialdirektor Prang, "Gegenwartsfragen der Finanzpolitik der Deutschen Reichsbahn", *Die Reichsbahn*, April 6, 1938, pp. 348 et seq.

¹³⁹ *Ibid.*

¹⁴⁰ Dorpmüller, *loc. cit.*, p. 38.

TABLE D
DISTRIBUTION OF THE REICHSBAHN'S EARNINGS FROM OPERATIONS
FOR THE YEAR ENDED DECEMBER 31, 1938^a
(expressed in Reichsmarks)

CREDITS		
Balance carried forward from 1937	8,144,679.54	
Earnings from operations	252,070,666.99	
Other income	111,690,169.14	
		371,905,515.67
DEBITS		
Charges in respect of dividends ^b	75,933,767.39	
Charges in respect of credits	66,270,970.37	
Appropriation to the Reserve for the Foreign Exchange Adjustment Account ^c	12,547,958.36	
Appropriation to the Reserve for the Redemption of Preferred Shares ^d	36,000,000.00	
Appropriation to Statutory Reserve	96,307,852.85	
Additional payment to the national treasury	73,385,337.85	
Surplus carried forward to next year	11,459,628.85	
		371,905,515.67

^a "Geschäftsbericht der Deutschen Reichsbahn, Jan. 1—Dec. 31, 1938", *Die Reichsbahn*, May 17-24, 1939.

^b Pursuant to the recognition of the Reichsbahn as a "separate property" of the Reich under the laws of 1937 and 1939, dividends on preferred shares are treated like interest on other credits.

^c In explanation of this item, it is necessary to call attention to a law of December 23, 1936 (*RGBl* I, p. 1126) dealing with "profits made through devaluated foreign currencies". This seizes profits made on obligations payable in foreign currencies on the basis of the exchange value of the reichsmark and the foreign currency at the time of the discharge of the obligation. Under the first ordinance executing this law, the debtor may retain 25 per cent of such profits. The new valuation of credits obtained by the Reichsbahn in connection with the international loan of 1930 and certain minor obligations held in foreign countries yielded it a profit of 119.3 million RM. A reserve has been set aside to meet the liability created by the law in favor of the Reich.

^d The setting aside of 36 million RM annually toward the reserve for the redemption of preferred shares is a statutory requirement.

of the year.¹⁴¹ This total included the fixed annual contribution of 70 million RM,¹⁴² a dividend of 35 million RM on the preferred shares which had been assigned to the general government without payment,¹⁴³ pension charges of 160 million

¹⁴¹ *Ibid.*, p. 39. The corresponding sum for 1936 was estimated at 663 million RM; for 1937, 757 million RM. *Archiv für Eisenbahnwesen*, July-August 1938, p. 898.

¹⁴² After the Lausanne agreement abolished the reparation tax of 660 million RM annually, the Reich exacted from the Reichsbahn the fixed sum of 70 million RM, which was collected in the years 1932 to 1936 inclusive.

¹⁴³ Cf. *supra*, note 118 and p. 37.

RM traceable to excess personnel at a prior stage and regarded as a political necessity, the transport tax, and expenses due to changes in boundaries. In addition, it was said, services were rendered in behalf of the policies of the general government, outside of the business sphere of the Reichsbahn, amounting to 100 million RM. In the face of these circumstances, it is impossible to calculate "profit" in any ordinary sense, accruing to the Reich as owner of the gigantic property involved in the railway network and its subsidiaries and ramifications.¹⁴⁴

d. *Accounting.* The preceding discussion has anticipated and given point to the question of accounting methods. For some decades there has been discussion in all countries regarding the need to adapt the customary modern methods of governmental accountancy in order to suit them to the conduct of public undertakings of an economic nature. Traditional governmental bookkeeping has drawn its inspiration from the fundamental notion of budgetary responsibility. Its transcendent purpose has been to see that receipts reached the treasury and that moneys were paid out only in accordance with law within limited fiscal periods. Legality, not profitability, has been the cynosure of state accounting. Commercial bookkeeping, on the other hand, has not always been revealing but, in terms of its own ideals, it has sought to disclose to those who had reason to know two sets of facts: profit, matching income against expenditure, preferably for each type of transaction as well as for the operations as a whole; and total worth, including not only physical inventories but the over-all reckoning of a capitalistic calculus. The two forms of accounting—cameralistic and commercial—were thus sharply contrasted. The discussion of their respective defects and advantages was stimulated by the tightening of administrative reform, on the one hand, and, on the other, by the scale and pace of public enterprise. In no country, probably, were the contrast of the methods of bookkeeping and the need for adaptation of the cameralistic system more discussed than

¹⁴⁴ According to Napp-Zinn, the "return" on the capital was 4.9 per cent in 1929. "Die Deutsche Reichsbahn-Gesellschaft", p. 348. The corresponding percentage in 1938 appeared to be smaller.

in Germany, particularly during the period of the Weimar constitution.¹⁴⁵

As applied to the railroads, criticism of the suitability of existing accounting methods had been frequently heard during the time of ownership by the states.¹⁴⁶ The schemes in use were exact but essentially cameralistic. In some states supplementary records were maintained but, with mounting incomes, these were generally regarded as superfluous. The state railroad managements and the state fiscal officers, however, were not wholly oblivious to the problem. Mention has already been made of the balance sheet and profit and loss statement which Prussia introduced for its state railways on the eve of the World War.¹⁴⁷

The circumstances which attended the railroad law of August 30, 1924 made it natural that certain features of commercial bookkeeping should be required.¹⁴⁸ This emphasis has had a lasting effect. The form of accounting of the Reichsbahn is within its own control. Certain commercial usages are studiously followed or adapted. The underlying bookkeeping process, being still essentially that of the Prussian state railways, is more properly to be described as a modified and refined governmental scheme than a strictly commercial one.¹⁴⁹ But whatever the form, the spirit of the method is not cameralistic.

A superimposed improvement of outstanding interest has been the development by the Reichsbahn of three types of cost accounting. The first is related to the emphasis which is placed upon geographical decentralization in management. Accounting in terms of railway districts was begun in 1926.

¹⁴⁵ Illustratively, mention may be made of one of the series of *Lehrbücher für Verwaltungsschulen* given out by the Prussian *Städte-tag*: A. Brendle and H. Dassel, *Die kaufmännische Buchführung in den wirtschaftlichen Einrichtungen der Gemeinden* (Mannheim, Berlin and Leipzig, 1931).

¹⁴⁶ Conrad, "Zur finanzwirtschaftlichen Selbständigkeit der Deutschen Reichsbahn", pp. 749 et seq.

¹⁴⁷ Cf. *supra*, p. 28.

¹⁴⁸ The discussion of this matter at the time of unification is illustrated in Leopold Mayer, "Eisenbahnbilanzen und Eisenbahnwirtschaft", *Zeitschrift für Verkehrswissenschaft*, 8. Jahrgang, Heft 1, 1930.

¹⁴⁹ Conrad, *loc. cit.*, p. 754.

An attempt was made to maintain figures which would permit the drawing up of a balance sheet and the presentation of a profit and loss statement for each district, thus facilitating comparisons and even a bit of managerial competition. In 1936, however, the scheme was suspended because of the administrative expense that it involved.¹⁵⁰ A second development has been the application of cost analysis to the operations of the Reichsbahn generally.¹⁵¹ In this way it has been possible, for example, to compare various types of motive power or to say whether a certain fast train was paying or not. A third extension of the principle of costing has been the self-contained accounting of the workshops. They have been treated virtually as autonomous factories, their finances being kept separate from those of the districts that they serve.

c. *Audit.* In connection with public enterprise, the problem of auditing methods is a double one. On the one hand are issues which involve all types of governmental activity. Outstanding is the question of the demarcation of the appropriate spheres for financial control, which is properly a phase of administrative command, and of audit, which has been conceived of as an aspect of legislative oversight.¹⁵² On the other hand, public enterprise presents special difficulties which result from its peculiar need for flexibility.¹⁵³ The extreme solution is to allow an autonomous public enterprise to have itself audited by a private certified accountant of its own choosing. But this is hardly an ideal. It seems sound to envisage the possibility of forms of public accountability which will accommodate themselves to the nature and needs of public enterprise.

In the case of the railroads, the partial independence from the general government so studiously safeguarded by the act

¹⁵⁰ *Ibid.*, p. 755 n. 1.

¹⁵¹ Dr. Ing. Remy-Köln, "Vier Jahre nationalsozialistische Reichsbahnarbeit am deutschen Verkehr", *Zeitschrift für Verkehrswissenschaft*, 14. Jahrgang, Heft 2, 1937.

¹⁵² Harvey C. Mansfield, *The Comptroller General* (New Haven, 1939).

¹⁵³ John McDiarmid, *Government Corporations and Federal Funds*; cf., also, Mansfield, *op. cit.*, pp. 225-44.

of August 30, 1924 expressly put the company beyond the reach of the Court of Audit (*Rechnungshof*).¹⁵⁴ A special examining service was created within the railway system. In its essentials, this device has survived.¹⁵⁵ The service consists of a head examining office and district examining offices. The head examiner is appointed by the minister of transport, in consultation with the minister of finance and the president of the Court of Audit. The minister of transport appoints the members of the staff, upon recommendation of the head examiner and again in consultation with the minister of finance. To this service are recruited the most competent men available in the railway departments; thorough knowledge of railway affairs is a prerequisite. Auditors must be over 35 years of age and not more than 50 when appointed. Family relationship to head examiners is a bar to appointment. The process of examination itself is largely concentrated in the operating districts. The position of the auditor is a delicate one, for he is at once a colleague and a checker. The examination is partly one of audit; partly it is a critique from the standpoint of efficiency. If the head examining office is dissatisfied with a decision of the minister of transport, it may appeal to the minister of finance who decides the matter, after having heard his colleague and the president of the Court of Audit. Disciplinary measures against members of the head examining office can be taken only with the consent of the minister of finance.¹⁵⁶

In addition, the statutes under which the autonomy of the railways was developed retained a right of inspection for the

¹⁵⁴ Incidentally, it may be remarked that although members of the *Rechnungshof* are still protected by law as respects temporary or permanent removal from office, retirement or discipline, a law of June 17, 1936 (*RGBl* II, p. 209) permits their transfer to other positions and has perhaps weakened the independence of the *Rechnungshof*.

¹⁵⁵ Auditing Order for the German Railways (*Rechnungsprüfungsordnung für die Deutsche Reichsbahn*) of July 11, 1939. *Die Reichsbahn*, July 19-26, 1939, p. 727.

¹⁵⁶ Cf., for the period preceding the Auditing Order of July 11, 1939, Weirauch, "Der Prüfungsdienst bei der Deutschen Reichsbahn", *Archiv für Eisenbahnwesen*, January-February 1937, pp. 23 *et seq.*

government in regard to certain major records.¹⁸⁷ The government, which was free to choose its agent in this matter, utilized the *Rechnungshof* until 1931. Objections were voiced on the ground of dualism. In 1931 an informal arrangement was concluded between the ministers of transport and of finance whereby the annual inspection is made by the head of the *Rechnungshof*, acting personally, and the head of the Audit and Trust Company (*Revisions- und Treuhandgesellschaft*),¹⁸⁸ a public institution. The annual business report is now prepared by the head examining bureau of the Reichsbahn, signed by the minister of transport, and submitted to the minister of finance, with an opinion of the president of the Court of Audit appended.*

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¹⁸⁷ The law of August 30, 1924, par. 30, sec. 2, stipulated that "the government shall have the right to examine the company's balance sheet and profit and loss account at any time, to inspect all such books of account concerning the balance sheet and profit and loss account as are kept at the main office of the company and to call for all necessary information, provided that no special expenditure is thereby entailed on the company."

¹⁸⁸ Weirauch, *loc. cit.*, p. 39.

* Acknowledgment is made of the assistance of Dr. Ludwig Homberger, formerly a director of the Reichsbahn in charge of the financial department, now lecturer on transportation in the Graduate School of The American University, Washington, D. C., in scrutinizing the proofs of this article.

AUTONOMOUS PUBLIC ENTERPRISE—THE GERMAN RAILWAYS III *

TRAFFIC, RATES, AND TRANSPORT COÖRDINATION

THE ideal of independence in the conduct of public undertakings must make terms with the need for coördination. More is at stake than managerial efficiency which is so markedly aided by a due combination of flexibility and stability. Arrangements that are too self-contained may block a balanced treatment of conflicting interests or permit the use for narrow ends of the earnings of a strategic resource which should be widely shared. In the field of transport, especially, there is need for a comprehensive view, if only to avoid a premature stifling of competition among substitute forms. A possible risk of public ownership of railroads is that the state will protect its investment by an unduly conservative attitude toward newer means of transport. But this risk is not peculiar to public ownership; it may exist under governmental regulation of private railway systems. Experience has shown the protective tendencies of ostensibly policing agencies and their disposition to be colored by the needs of the particular economic interest to which they are assigned. Even when their jurisdiction is extended, their original preoccupation may persist. Nor is the risk of a defensive narrowing of attitude in the treatment of publicly owned railroads confined to autonomous forms of organization. On the contrary, a government which manages them in a directly bureaucratic manner may fall even more readily into a jealous policy. Under favorable conditions, a well-considered devolution of railway management may aid in realizing a comprehensive handling of transportation. Such a concert is the ultimate test of the soundness of autonomous forms.

* The first installment, dealing with the organization, and the second installment, dealing with the financial structure of the railways in successive periods, appeared in the December 1939 and March 1940 issues of the *QUARTERLY*.—ED.

The exigency of the mood and method of National Socialism clouds the lessons of the partially autonomous management characteristic of the German railways. The hazards have been those of subordination rather than of independence. But the relationships that exist among the several forms of transport are hardly less interesting for this reason. The question of their interaction may best be approached by examining the trends of railway rates and traffic, for which a background has been provided in the discussion of the financial structure of the Reichsbahn.

a. *Traffic and Rates.* The increase in the volume of movement on the railroads has not brought a corresponding increase in revenue. This has been true in both passenger and freight traffic. The causes have been partly technological, having to do with the appearance of substitute forms of transportation. Partly they have been matters of deliberate social policy. In this double play, passenger business and freight business differ sufficiently to warrant their separate consideration. The relative importance of the two is briefly indicated in the fact that in 1938 the total income from passenger traffic was 1,432,-321,370 RM, whereas freight brought in a total of 3,355,-536,254 RM.¹⁰⁰

(1) *Freight traffic and freight rates.* The volume of freight reached a peak in 1929. It was not until 1937 that the summit was again approached. Expressing the matter by indices, taking 1928 as 100, the total revenue freight carried was 100.9 and income therefrom 106.5 in 1929. The low points were

¹⁰⁰ These figures are taken from the Operating Account of the year ended December 31, 1939. This aspect of the German railways is illuminated by the following comparison presented by Dr. Ludwig Homberger in *Wirtschaftsführung und Finanzwesen bei amerikanischen Eisenbahnen* (Berlin, 1929), p. 8:

	Reichsbahn	American Railways	% of 1:2
Passengers carried in 1927 (in millions) ..	1,909	830	230
Revenue from passenger and baggage traffic per passenger-km in Rpf.	3.03 *	7.55	40
Goods of all kinds carried in 1927 (in millions)	489	2,398	20.4
Revenue from goods traffic per ton-km in Rpf.	4.44 *	3.1	143

* Without transport tax.

reached in 1932, with total freight carried at 56, and revenue at 52.9. It will be observed that the gap between the two was widening. In 1925, when the total freight carried was 86.3, revenues were at 87.7. In 1934, when the volume had climbed to 73.2, revenues from freight were at 65.5.¹⁶⁰ The same tendencies for the period 1932 to 1937 may be summarized by saying that the quantities carried increased by 85.4 per cent;¹⁶¹ the earnings from freight (roughly two thirds of all earnings), 70 per cent.¹⁶²

In the economic recovery since 1932, transportation has not kept pace with production. Thus there was an increase of 80 per cent during that five-year period in all forms of transport — rail, road, canal, river — but production had doubled. One explanation was said to be localization of industry.¹⁶³ Nevertheless pressure on the transportation network is evidently severe and the condition has undoubtedly been aggravated by the postponement of railway needs.

The tendency of income from freight to lag behind the volume reflects in part the social policies which have been injected into the rate structure. The philosophy and the method of National Socialism have intensified the tendency toward the use of special rates, although the practice was far from an innovation. Before 1914, about 60 per cent of all goods traffic in Germany moved under commodity railway tariffs (*Ausnahmetarife*),¹⁶⁴ whereas in 1937, 70.1 per cent of the total was so handled.¹⁶⁵ The usage, now accelerated, is superimposed

¹⁶⁰ Prang says traffic in ton-kilometers increased from 44.4 billion to 79.5 billion, a 79.1 per cent increase. "Gegenwartsfragen der Finanzpolitik der Deutschen Reichsbahn", *Die Reichsbahn*, April 6, 1938, p. 353.

¹⁶¹ *Die Reichsbahn*, May 11, 1938, p. 490. An article, "5 Jahre Aufbauarbeit der Deutschen Reichsbahn, 1932-1937", *Die Reichsbahn*, March 30, 1938, p. 308, states: "Hauled tons increased 78 per cent. Income per ton in 1937 was 5 per cent less than in 1932."

¹⁶² *Konjunkturschwankungen im Reichsbahnverkehr, Sonderheft Nr. 38 des Instituts für Konjunkturforschung* (Berlin, 1936), p. 14.

¹⁶³ *Supplement to the Weekly Report of the German Institute for Business Research (Institut für Konjunkturforschung)*, September 22, 1938, p. 2.

¹⁶⁴ Kurt Wiedenfeld, "Monopolitendenz und Frachtgestaltung im Eisenbahnwesen", *Archiv für Eisenbahnwesen*, March-April 1936, p. 276.

¹⁶⁵ E. Ziche, "Die Leistungen der Deutschen Reichsbahn nach dem Geschäftsbericht 1937", *Archiv für Eisenbahnwesen*, July-August 1938, p. 878.

upon a new rate structure introduced after unification. A word regarding its history is appropriate.

When the railroads were in the hands of the several states, freight rates classified goods according to value and did not vary the kilometer charge with distance.¹⁶⁶ The contrasting tapering scheme was used only in the application of exceptional tariffs. This condition was encouraged by the decentralized ownership of the railroads by separate states. In 1877, it is true, a unified rate scale for all German state and private railroads was introduced and in 1890 normal rates were completely coordinated.¹⁶⁷ Exceptional rates might still be made by the individual railroads.¹⁶⁸ Meanwhile the adjustment of through rates under the normal tariffs was simpler when the charge per unit of distance did not decrease with distance.

A fundamental change took effect on December 1, 1920, when the principle of tapering rates in accordance with distance was generally applied. The unification of the network facilitated a development which altered conditions made imperative. The territorial adjustments that followed the peace

¹⁶⁶ Eberhard Greiner, *Die Deutsche Reichsbahn seit ihrem Bestehen, insbesondere deren gesetzliche Grundlagen und Organisation, Finanzwesen, Tarifwesen und Rationalisierung* (Dissertation, Würzburg, 1931), pp. 49-54.

¹⁶⁷ Wiedenfeld, *loc. cit.*, p. 252. Despite the supposed unification, many variations continued to exist in passenger rates, particularly in regard to classes. Cf. Kittel, "Eisenbahn und Staat in Deutschland", *Archiv für Eisenbahnwesen*, July-August 1936, p. 723, n. 2.

¹⁶⁸ During this stage, the interplay of state purposes and national influence in the handling of exceptional tariffs was neatly illustrated by the special rate for grains introduced by the Prussian-Hessian railway system in 1891. The arrangement was originally devised to offset a poor harvest in Western and Central Germany; it brought the agricultural East nearer to the industrialized West. At the time, even Bavaria benefited, for it could send surplus oats to Holstein. But when the supply of wheat became plentiful, with a falling price, a growing clamor was raised. The Prussian railways were blamed for admitting a flood of East Prussian grain. Bavaria found leverage at hand. A German-Russian commercial treaty was then being negotiated. Bavaria made its consent contingent on the abolition of the special Prussian railway rate on grain. Prussia, under pressure from the national government, abolished the differential in 1894. Another phase of the bargain illustrated the interlocking of railway rates and import duties. As a recompense for the loss of markets in Western Germany, the farmers of East Prussia were granted an export premium in the form of import certificates equal to the duties levied. Wiedenfeld, *loc. cit.*, pp. 250-1.

had wrenched some areas in Germany out of their accustomed local contexts; more distant shipments were necessary. Wages were going up in centers of production which had previously been able to offset high transportation charges by low labor costs. The concentration of certain natural resources—coal, for example, in the Ruhr and in Upper Silesia—emphasized the desirability of rates which would facilitate long-distance haulage. All of these factors gave point to the shift to the new rate base.¹⁶⁹ An additional difficulty with the old rate structure, and a further reason for revision, lay in the fact that certain commodity rates were, in effect, discriminations in favor of German shippers and inconsistent with Article 325 of the Treaty of Versailles.¹⁷⁰

The trend in freight rates between 1919 and 1933 was primarily marked by adjustments to price fluctuations. When the mark was put on a gold basis in November 1923, freight tariffs were double those in force before the War. During 1924 three successive reductions were made which brought rates down to a point 48 per cent above the pre-war level.¹⁷¹ Under the National Socialist régime, however, a policy of drastic freight reduction was adopted to stimulate industry by counteracting increasing production costs and to meet the competition of road and water facilities. By 1938 nearly three fourths of all freight was being carried at special rates and it was deemed necessary to raise most of the "normal" tariffs by 5 per cent. The general downward trend is indicated by the fact that in 1938 freight as a whole was moving at rates 13 per cent lower than in 1928.¹⁷² The picture is even more

¹⁶⁹ Greiner, *op. cit.*, pp. 49-58. Cf. also Kurt Giese, *Hauptfragen der Reichsbahnpolitik* (Berlin, 1928), pp. 43 *et seq.* and 60 *et seq.*

¹⁷⁰ Article 325 reads: "The seaports of the Allied and Associated Powers are entitled to all favors and to all reduced tariffs granted on German railways or navigable waterways for the benefit of German ports or of any port of another Power."

¹⁷¹ Greiner, *op. cit.*, p. 63. The ratio of freight rates in 1913 and 1936 was 1:1.23. Julius Dormmiller, "Die Deutsche Reichseisenbahn 1918-1936", *Deutsches Institut für Bankwissenschaft und Bankwesen, Probleme des Deutschen Wirtschaftslebens*, p. 23.

¹⁷² Supplement to the *Weekly Report of the German Institute for Business Research*, September 22, 1938, p. 4.

striking when the average receipt per ton-kilometer for 1928 and 1938 is compared: it was 4.48 Rpf. in 1928 and 3.56 Rfg. in 1938, or in other words, there was a reduction of about 20 per cent.

The subordination of the freight rate structure to considerations of economy, defense and politics may be illustrated by noting some of the special adjustments.¹⁷³ Material for the *Autobahnen* was carried at cost, this accommodation (rendered for an ostensible subsidiary which was in reality a rival) amounting to a probable total sacrifice of 100 million RM at the end of 1937.¹⁷⁴ In addition, some arrangements were even more directly political. Building materials for the party grounds at Nuremberg were forwarded at a reduced rate of 30 per cent. And goods destined for winter help (*Winterhilfe*) were shipped free of charge, entailing a freight revenue loss to the Reichsbahn of 18 million RM.¹⁷⁵

From the standpoint of the railroads themselves the reaction of the special rates seems likely to be increasingly disadvantageous. With mounting pressure on the transportation facilities (aggravated by the territory acquired in 1938), special rates entail a real sacrifice. But the long-run effect must be looked at in terms of the deliberate encouragement of the diversion of traffic to other forms of transportation, notably waterways.¹⁷⁶

(2) *Passenger traffic and passenger rates.* Before the analysis passes to the coordination of the several means of transportation, certain aspects of passenger business claim attention. The high point was in 1928, in regard to both number of

¹⁷³ The rates effective in 1937 reflected the four-year plan. Thus special rates were established for raw materials used in the manufacture of artificial wool and cotton yarns. Special rates were also allowed for German raw materials where such rates stimulated their use and saved foreign exchange; examples were ores, slags, and synthetic Diesel fuel. Low rates on potash and calcium were designed to help agriculture. On the other hand, by way of aiding exports, iron and steel goods, paper, glass supplies, and chemicals could be hauled to seaports at special rates. *Archiv für Eisenbahnwesen*, July-August 1938, p. 877.

¹⁷⁴ "5 Jahre Aufbauarbeit der Deutschen Reichsbahn, 1932-1937", p. 313.

¹⁷⁵ *Die Reichsbahn*, May 11, 1938, p. 493.

¹⁷⁶ Cf. *infra*, p. 184.

persons transported and revenue from this source. The low was in 1933.¹⁷⁷ Since that time the agitated pace of German life has been reflected in travel by rail as well as road. In 1937 passenger traffic had increased 62.7 per cent over 1932. Earnings from this source, however, had risen only 31.7 per cent.¹⁷⁸ In 1929 receipts per passenger-kilometer averaged 3.02 Rpf., but in 1937 only 2.37 Rpf.—a decline of 21.5 per cent.¹⁷⁹

The relative dropping away of passenger business has resulted in part from automobile competition.¹⁸⁰ But in considerable measure, also, account must be taken of the fact that passenger business has been rendered less remunerative by the policies regarding rates. In 1937, 71.6 per cent of all passengers were carried at reduced rates,¹⁸¹ compared with 58.16 per cent five years before.¹⁸²

¹⁷⁷ Using 1928 as 100, the index of persons transported fell to a low of 61.7 in 1933 and was only 67.7 in 1934. The income from passenger traffic, taking 1928 as 100, was 58.6 in 1933, and 63.5 in 1934. The discrepancy reflects the lower revenue per passenger-kilometer, which (still taking 1928 as 100) was 63.2 in 1933 and only 73.1 in 1934. *Konjunkturschwankungen im Reichsbahnverkehr*.

¹⁷⁸ Prang, *loc. cit.*

¹⁷⁹ *Archiv für Eisenbahnwesen*, July-August 1938, p. 882. The transport tax is not included in these figures.

¹⁸⁰ During the decade from 1921 to 1931, private motor cars in the Reich increased 8.7 times; busses, 7.8 times; and motorcycles, 28.7 times. *Konjunkturschwankungen im Reichsbahnverkehr*, p. 36. Investigations indicated that each private automobile means an annual loss to the Reichsbahn of 10,000 passenger kilometers, entailing an income loss of 410 RM per passenger car. The loss per bus was reckoned at 5,600 RM per bus. (A calculation of this matter was offered in a publication, *Reichsbahn und Kraftwagenverkehr*, issued by the railway management in 1930.) The total loss from motor vehicles was estimated to have been 36,600,000 RM in 1926 over what it had been in the previous year; in 1934 it had risen to 264,200,000 RM. *Ibid.*

¹⁸¹ *Archiv für Eisenbahnwesen*, July-August 1938, p. 882.

¹⁸² Prang, *loc. cit.* Some of the adjustments were for particular classes of riders: homeworkers, school children, members of the youth movement, sport and other societies, circuses, farmers' helpers to and from job location, etc. Some of the reductions were in connection with particular festivities; for example, in 1938, the exhibition of the national nutrition office in Munich for which 642 special trains were run; the festival of the German singing societies in Berlin for which there were 277 special trains; special trains for the national party festival at Nuremberg in September, and for Harvest Day at

It would be a grave error, of course, to consider this sort of reduction as novel and a mistake also to regard it as necessarily unremunerative. All railway systems offer reduced fares. National railway networks, like the Swiss, have participated notably in cultural movements. The German system was used to reductions for social purposes. It is not surprising that the showmanship of National Socialism should have asked for even more drastic and varied cutting. Much of it has coincided with defensive reduction of rates in which alert railroad managements are likely to engage in the face of alternate forces of transportation. It is timely to pass to the question of competition and coordination.

b. *Coördination*. The rise of substitute modes of rapid transportation has completely altered the position of the German railways. Their monopoly, which was *de facto*, if not *de jure*, is gone. This, in itself, has been an additional reason for giving them flexibility if they were to survive. But the situation has also been a reason, in Germany as throughout the world, for giving heed to the problem of coordination of all means of transport.¹⁸³

Germany under the Weimar Constitution had at hand instruments of adjustment. Rail transport had been substantially unified; the Reichsbahn was incidentally a holding company which acted as a hub of widely ramified, related industries. In the Reichspost, Germany possessed an important adjunct of road transport, increasingly active in the motorbus field.¹⁸⁴ An agreement of July 1929 provided that

Bückerburg. The burden to the railroad was shown by the fact that the 71.6 per cent who traveled at reduced rates contributed only 58.50 per cent of the total revenues from passengers and baggage, whereas the remaining 28.36 per cent earned 41.50 per cent of that total for the railroads. *Ibid.*

¹⁸³ For a survey of transport coordination in various countries, *cf.*, for instance, W. Rodney Long, *Transport Control Abroad*, U. S. Department of Commerce, Trade Promotion Series No. 196 (Government Printing Office, Washington, 1930); *Coordination of Transport: Results of an Enquiry Addressed to Governments*, League of Nations Publications, Transit, 1938, VIII. 6. *Cf.* also *Public Aids to Transportation*, 4 vols., Government Printing Office (Washington, 1940).

¹⁸⁴ *Cf.* *Eisenbahn und Kraftwagen: Tatsachen und Gedanken zur Neugestaltung des deutschen Verkehrswesens. Denkschrift des Studienausschusses*

the Reichspost should confine its motor carriage to passengers,¹⁸⁵ while the Reichsbahn, so far as it maintained trucks, was to be contented with the transport of freight.¹⁸⁶ The German government, furthermore, was involved as an investor in water and air transport. But the general articulation was hardly perfected and the slackening of trade after 1929 sharpened the competition among the alternative forms of transport.

The elaborately coordinative architecture of National Socialism has been extended to transportation. In reconciling the several means of transport, however, the formal organs of concert have been less important thus far than the fact that in the burst of national preparation Germany overtook her transportation facilities.¹⁸⁷ With the railroad freight facilities taxed to the limit, it has been easy to encourage waterways and to maintain that highways hold no menace for the railroads. A unified view of transport is wholesome, of course. But the practice of coordinated transport in Germany does not mean that the economic position of the German railroads has not been seriously jeopardized. Ironically enough, railroad credit has been used to develop a competitor. The immediate result

"Eisenbahn und Kraftwagen" beim Deutschen Industrie- und Handelstag März 1930 (Berlin, 1930), p. 33. From June 1, 1932 the railways and the post office were under the supervision of a common ministry, headed by Freiherr Eltz-Rübenach. This connection was severed with his resignation in February 1937.

¹⁸⁵ Traditionally the German railways were required to transport the mails free of charge. Sir William Acworth and his associate, in their memorandum of March 26, 1924, commented unfavorably on this arrangement, observing that in Great Britain the railways were receiving four million pounds sterling from the government for this service. *Report of the Expert Committee Appointed by the Reparation Commission*, Annex No. 3. The law of August 30, 1924 ordained compensation. Cf. Willy Muser, "Die Rationalisierungsbestrebungen der Deutschen Reichspost", *Hamburger Wirtschafts- und Sozialwissenschaftliche Schriften*, Heft 15 (Rostock, 1930), p. 56. The payment by the post office to the railway system averaged 100 million RM annually.

¹⁸⁶ But the Reichsbahn maintains some motorbus lines: 87 in the Old Reich, 139 in the Sudeten district, and 89 in the Ostmark (Austria), the latter under the name "Köb" (*Kraftwagenbetrieb der österreichischen Bundesbahnen*). Adolf Sarter and Theodor Kittel, *Was jeder von der Deutschen Reichsbahn wissen muss*, p. 41.

¹⁸⁷ A shortage was marked as early as 1937. *Supplement to the Weekly Report of the German Institute for Business Research*, September 22, 1938.

is sound; its long-run implications are truly significant; but the intermediate future may prove troublesome.

(1) *Ramifications of the Reichsbahn.* In surveying the means of coordination, it is necessary, first, to note the extent to which the Reichsbahn, acting as a holding company or exercising influence as an investor, has in itself served as a mechanism of concert. Ramifications of this sort have naturally been confined in the main to activities incidental or complementary to transport by rail. Some of the investments, however, have extended beyond railroading and have anticipated the recent financial relations of the Reichsbahn to the express highways.

The involvements organically related to railway service need be mentioned only briefly. Their range and variety would make it difficult as well as tedious to describe them exhaustively. In discussing the financing of the Reichsbahn, mention was made of the *Deutsche Verkehrs-Kredit-Bank AG*, originally formed largely to finance deferred freight payments. Note has been taken in the same connection of the formation, through this bank, of another subsidiary, the *Reichsbahn-Beschaffungs-GmbH*, which as a supply company helped to handle railway purchasing in behalf of the work program.

Organic from the standpoint of railway operations have been affiliates such as *Mitropa* (*Mitteuropäische Schlafwagen- und Speisewagen-AG*), *MER* (*Mitteuropäische Reisebüro GmbH*), and the *Reichsbahnzentrale für den Deutschen Reiseverkehr GmbH*.¹⁸⁸ *Mitropa* has been organized as a stock company for the purpose of providing sleeping cars and dining cars. The Reichsbahn owns almost all shares. In the case of the second of the undertakings mentioned, the Mid-European Travel Bureau, the Reichsbahn owns more than one third of the shares, the other outstanding owners being steamship companies and the Hungarian railways. The *Reichsbahnzentrale*, concerned with publicity, was organized as a limited liability

¹⁸⁸ A. F. Napp-Zinn, "Die Deutsche Reichsbahn-Gesellschaft", *Schriften des Vereins für Sozialpolitik*, vol. 176, part 2, pp. 368-9, 371-2, 377. Cf. also Sarter and Kittel, *Was jeder von der Deutschen Reichsbahn wissen muss*, pp. 34-5.

company wholly owned by the Reichsbahn. The *Deutsche Bahnspedition*, a forwarding company, also wholly owned by the Reichsbahn, is another ramification. Related types of adjuncts are the numerous leased facilities connected physically and in some cases also functionally with the railway services.¹⁸⁹

Somewhat different are affiliations with power companies which supply current for the railroads. The Reichsbahn owns stock in two such companies—*Mittlere Isar-AG* and *Walchenseewerk-AG*—in both of which Bavaria also holds shares.¹⁹⁰

The element of coordination is more apparent when an organization like the Reichsbahn participates in other transportation concerns, especially when other types of transport are involved. Sometimes stock ownership in this connection has been a phase of railway unification. Thus the Reichsbahn acquired four fifths of the capital stock of the *Lübeck-Büchener Eisenbahn-Gesellschaft*, the largest of the privately organized railways in Germany, of which it became the sole owner in 1938. Sometimes stock ownership has extended into cognate but somewhat competitive fields. Thus the Reichsbahn had an interest in the *Rhein- und See-Schiffahrts-AG*, in which Prussia held a majority of the stock.¹⁹¹ And for a time it was likewise involved as a stockholder in a number of motor com-

¹⁸⁹ Julius Dormmüller, in "Die Deutsche Reichseisenbahn 1918-1936", p. 58, lists 3,265 restaurants, 875 bookstores, and 1,346 shops.

¹⁹⁰ Napp-Zinn, *loc. cit.*, p. 372. In order to be assured of continual supply of current the Reichsbahn has also granted large loans to these electricity works. At the end of 1938, 3,236 km were electrified out of a total of 69,932 (which included Austria and the Sudeten district but not Memel). Sarter and Kittel, *op. cit.*, p. 69. Outstanding is the electrification of the Berlin metropolitan, circular and suburban railways. Cf. Remy, *Die Elektrisierung der Berliner Stadt-, Ring- und Vorortbahnen*, *Archiv für Eisenbahnwesen*, 1931—Beiheft.

¹⁹¹ The comment in the text, naturally, is confined to undertakings related to water-borne commerce in which the Reichsbahn, as distinguished from the Reich, was interested. Under the latter head fall various mixed undertakings for canalization purposes: the *Neckar AG*, the *Rhine-Main-Danube AG*, and the *Teltow-Kanal AG*. The Reich owned shares in these corporations to the amount of 2,560,000, 918,000, and 200,000 RM respectively. Martin Sogemeier, *Die öffentliche Hand in der privaten Wirtschaft* (Berlin, 1926), p. 97; Ernst Hansen, *Die Beteiligungen des Reiches an industriellen Unternehmen* (Leipzig, 1931), pp. 56-7.

panies organized by combinations of public bodies.¹⁹² This tendency, however, was arrested about 1929 by the withdrawal of the Reichsbahn from the domain of passenger transport by road, in which it deferred to the post office.

The Reichsbahn itself operates trucks—2,500 at the end of 1938. Relatively speaking, its direct participation in road transport is hardly important. In 1937, for example, only 4.7 per cent of the freight moved by road was transported by Reichsbahn facilities, compared with 58.6 per cent handled by the commercial motor industry and 35.1 per cent by private companies for their own use.¹⁹³

(2) *Road-rail relationships.* The extent to which the traffic of the Reichsbahn, like that of railways systems generally, has lost to motor transport has already been noted. The fact that in 1937 the total long-distance freight carried by motor vehicles amounted in weight to only 3.1 per cent of that transported by the Reichsbahn¹⁹⁴ was no measure of relative importance, let alone of tendencies. For it has been seen that the railroads were losing remunerative forms of freight.

(a) *Construction of highways.* The motorization of transport has naturally been pushed in the Third Reich. This was hardly more than timely. The motives have had to do partly with transportation itself. Partly they have been the desire

¹⁹² Napp-Zinn, *loc. cit.*, p. 383, shows the following percentages of stock ownership in these companies:

Capital Stock	Kraftverkehr Kraftfahr- zeugen Sachsen AG 3,500,000 RM	Rheinische Verkehrs- gesellschaft AG 1,250,000 RM	Kraftverkehrs- gesellschaft "Hessen" 1,441,000 RM	Kraftverkehrs- gesellschaft m.B.H. Ortspersonen 7,134,430 RM
Reichsbahn	14.3	26	45.5	47.3
Reich	—	7.1	31.9	44.4
Länder, Provinces	46.3	14.3	8.5	2.5
Districts, Cities	35.7	45.4	14.1	5.2
Others	3.7	7.2	—	0.6

¹⁹³ A. von Neuhoff-von der Ley, "Der Güterfernverkehr mit Kraftfahrzeugen im Jahre 1937", *Archiv für Eisenbahnwesen*, January-February 1939, p. 128. The small amount of 1.6 per cent, not mentioned in the text, was carried by long-distance moving vans.

¹⁹⁴ *Ibid.*

to provide employment.¹⁹⁵ Partly the purposes have been defensive.¹⁹⁶ These have been substantial and no doubt sufficient reasons. But in a degree, at least, the new express highways have been made symbolic.

In 1933 the organization called *Reichsautobahnen* was launched in the form of a corporation. The statute which authorized it has been repeatedly amended and supplemented.¹⁹⁷ The purpose was the construction and maintenance of a net of express highways. From the standpoint of the present inquiry, the striking feature was the fact that it was founded as an ostensible subsidiary of the Reichsbahn. The latter took up non-interest-bearing founders' capital shares to the amount of 50 million RM. Through the treasurer's office and with the aid of the *Deutsche Verkehrs-Kreditbank* and a further new supply subsidiary, the *Reichsautobahnen Bedarfs-GmbH*, it undertook to provide financial service in behalf of the new organization. In essence, the credit of the Reichsbahn was utilized in the financing of an undertaking which is intended to be self-liquidating largely on the basis of taxation of motor vehicles. In addition, the railroads carried the construction materials at cost.¹⁹⁸

The degree to which the Reichsbahn has helped in supplying

¹⁹⁵ It was reported early in 1939 that 400,000 workers were employed directly or indirectly on road construction, 100,000 being engaged on the Reich motor highways, another 100,000 on other types of roads, and 200,000 in tributary industries. From a manuscript report by Dr. Otto Riesmann, furnished by the New York office of the Reichsbahn.

¹⁹⁶ Highways, it has been urged, can be repaired more quickly after aerial bombing than railways. The building of the West Wall has shown the unique elasticity of motor transport in times of pressure.

¹⁹⁷ June 27, 1933 (*RGBl* II, p. 509); Aug. 7, 1933 (*RGBl* II, p. 521); Aug. 25, 1933 (*RGBl* p. 438); Nov. 30, 1933 (*RGBl* I, p. 1057); Dec. 18, 1933 (*RGBl* I, p. 1081); Mar. 23, 1934 (*RGBl* I, p. 232); Jan. 23, 1935 (*RGBl* II, p. 37); Mar. 8, 1935 (*RGBl* II, p. 177); Mar. 14, 1935 (*RGBl* II, p. 421); May 14, 1936 (*RGBl* I, p. 440); June 1, 1938 (*RGBl* II, p. 207); June 1, 1938 (*RGBl* II, p. 208); July 25, 1938 (*RGBl* I, p. 951).

¹⁹⁸ Wilhelm Kleinmann, "Der Wettbewerb bei den einzelnen Verkehrsmitteln in Deutschland", *Jahrbuch der nationalsozialistischen Wirtschaft*, p. 448; "5 Jahre Aufbauarbeit der Deutschen Reichsbahn, 1932-1937", p. 313.

the sinews of the new undertaking is shown by the following statement of assets and liabilities:¹⁹⁹

STATEMENT OF ASSETS AND LIABILITIES OF THE REICHSAUTOBAHNEN FOR THE BUSINESS YEAR 1938—IN REICHSMARKS (millions omitted)

ASSETS		LIABILITIES	
PLANTS	3,076.8	OBLIGATIONS TOWARD REICHSBAHN	50.0
INVENTORIES	2.9	RESERVES	371.0
CURRENT ASSETS	139.2	DEBTS:	
UNADJUSTED CLAIMS	38.7	Acceptances	450.0
		Reichsbahn Loan	400.0
		Loan by the National Institute for Placement and Work Relief	625.0
		National Insurance Institute	100.0
		National Group "Insurance"	237.2
		Loan by the Finance Minister	902.0
		Other Credits	33.6
			2,747.8
		OTHER OBLIGATIONS:	
		Real Estate Purchases	41.5
		Purchases	7.3
			48.8
		UNADJUSTED CLAIMS	39.9
		BALANCE CARRIED FORWARD	0.1
	3,257.6		3,257.6

The statement of assets invokes the wholesome principle of setting down a value for the physical thing that has been constructed. But, so far as concerns the retirement of the debt incurred for construction, there are no earnings in the ordinary sense.²⁰⁰ Instead, there is the application of taxes on motor vehicles and their use.²⁰¹ In addition to this source of income,

¹⁹⁹ Abstract from the annual report of the *Unternehmen Reichsautobahnen* for 1938, *Die Reichsbahn*, June 28, 1939.

²⁰⁰ In 1938, operating earnings, derived from the operation of filling stations through a subsidiary, the *Reichsautobahn-Kraftstoff-GmbH*, created in 1936, amounted to only 400,000 RM. They were even insufficient to cover the operating expenses of 7.5 million RM.

²⁰¹ A law of July 2, 1936 (*RGBl* I, p. 531), drastically revising the transport tax law of a decade before, introduced a tax on motor common carriers and also on the motor transport of freight by individual concerns in their behalf when for greater distance than 50 kilometers; it provided incidentally for levies on the motorized transport of passengers by the Reichspost and the

increased duties on motor fuels and the proceeds from a tax on mineral oil,²⁰² totaling together 244.9 million RM, were assigned to the *Reichsautobahnen* to take care of interest service and amortization and to offset the operating loss.

Administratively, the relation of the railway system to the *Reichsautobahnen* has been advisory and facilitative, rather than directive. A statute of June 1, 1938,²⁰³ taking account of the changes in railway organization made in the preceding year, effected what were portrayed as complementary alterations in the *Reichsautobahnen*.²⁰⁴ The word "*Gesellschaft*" was dropped from the title. Its formal status as a branch undertaking of the Reichsbahn continued until the enactment of the railway law of July 4, 1939. The new act emphasized the reality of administrative control by the general government. The supervision and management of the *Reichsautobahnen* are in the hands of the inspector general of highways.²⁰⁵ The officials, including the executive personnel in charge of construction, are officers of the Reich. The by-laws must be approved by the finance minister. The Reichsbahn gives incidental technical assistance in certain financial matters and in bridge construction. Audit is conducted in part through the examining services of the Reichsbahn but the organ of general audit, the *Rechnungshof*, is also involved.²⁰⁶ The min-

Reichsbahn. Such taxation is based upon the transport charge, being 9 per cent in the case of freight, and 10-16 per cent for passenger business. Cf. Kleinmann, *loc. cit.*, pp. 446-8.

Besides the transport tax, of course, there is taxation on all motor vehicles on the basis of cylinder capacity or weight under the law of March 23, 1935 (*RGBl* I, p. 407).

²⁰² Ordinance of November 24, 1936 (*RGBl* I, p. 960).

²⁰³ *RGBl* II, p. 207.

²⁰⁴ Th. Kittel, "Die Neugliederung der Reichsautobahnen in die Reichsverwaltung", *Die Reichsbahn*, June 22, 1938, pp. 625-6.

²⁰⁵ This official (*Generalinspektor für das deutsche Strassenbahnwesen*) was provided for in a decree of November 30, 1933 (*RGBl* I, p. 1057). The inspector general, who for some years has been Dr. Ing. Fritz Todt, is a member of the advisory council of the Reichsbahn. Under the law of March 26, 1934 (*RGBl* I, p. 243) the highways were classified in four categories: *Reichsautobahnen*; national highways; highways of the first order; and highways of the second order. The inspector general was charged with the allocation.

²⁰⁶ Auditing procedure is subject to the ordinance of March 8, 1935 (*RGBl* II, p. 177).

ister of transport, who under the laws of 1937 and 1939 is also manager of the railways, is president of an advisory council of seven members attached to the *Reichsautobahnen*. In this capacity he has a consultative voice, though the influence thus afforded is lessened by the fact that the advisory group of the *Reichsautobahnen* seems relatively unimportant.²⁰⁷

(b) *Coördination through regulation.* The balance of road and rail has been sought partly by the exercise of regulative and taxing powers. The veering course of practice and policy may be briefly sketched.²⁰⁸ During the late twenties and early thirties a virtual rate war was waged by the railroads against the motor trucks. A phase of this was the offering of competitive commodity rates (*K Tarife—Kraftwagen-Ausnahmetarife*). In addition, arrangements were made with the forwarding companies in order to reduce the cost of cartage to and from depots; these were motivated by various inducements and required compliance with scales of charges fixed by the railway system. On March 30, 1936, the nature of road-rail competition was altered by the promulgation of the *Reichskraftwagentarif*, issued under the law of June 26, 1935,²⁰⁹ and the decree of March 27, 1936.²¹⁰ Truck rates were assimilated to the railway tariff structure, using the same classification and levels. The railways were protected by forbidding trucks to carry goods covered by the three lowest of the seven rate classes. Few special commodity rates, moreover, were permitted in the case of truck transportation. But two years later the defense of the railways was relaxed. A decree of the minister of transport on February 2, 1938 opened the lower tariff classes to trucking and permitted the semi-official organization of motor carriers to utilize commodity rates in connection with long-distance haulage.

²⁰⁷ Cf. *Reichsanzeiger* No. 137.

²⁰⁸ The writers take pleasure in acknowledging the assistance of Dr. Ludwig Homberger whose analysis, calling attention to distinctive features of the attempt at coördination of transport in Germany, has been paraphrased at this point.

²⁰⁹ *RGBl* I, p. 788.

²¹⁰ *RGBl* I, p. 320.

Regulation of motor carriers is bulwarked by licensing and approval. Begun as an emergency measure in 1931,²¹¹ the device has been extended since 1933.²¹² An interesting feature has been the requirement that any proposed new passenger road service must be submitted to the Reichsbahn for comment. Long-distance freight transport for hire, when more than fifty kilometers, is subject to special permission and numerous requirements regarding the inspection of books and the like.

The regulation of motor freight rates, as has been remarked, is facilitated by an association of long-distance operators, which in the middle of 1936 comprised 9,230 carriers.²¹³ Here the Reichsbahn possesses a partial defensive veto, for the association and the railway management must agree on the motor freight rates; otherwise the minister fixes them.²¹⁴ On January 1, 1939 a new pooling plan was introduced for tramp motor vehicles. Operators in this field had been showing an inclination to accept only goods subject to the highest rates. A shortage of road transport for certain types of goods forced

²¹¹ October 6, 1931 (*RGBl* I, pp. 537, 558).

²¹² In connection with passenger transport by road, under the law of December 4, 1934 (*RGBl* I, p. 1217), supplemented by the executive ordinance of March 26, 1935 (*RGBl* I, p. 437) and amended by the law of December 6, 1937 (*RGBl* I, p. 1319); in connection with long-distance freight tariff by road, under the law of June 26, 1935 (*RGBl* I, p. 788), supplemented by the executive ordinance of March 27, 1936 (*RGBl* I, p. 320).

²¹³ In 1938, 69 distributing centers were operated by the *Reichs-Kraftwagen-Betriebsverband*. This association entered into a working agreement with the group "Forwarding and Storage" according to which the number of delivery agents was increased. Forwarding and collecting agents now number 1,000. *Halbjahrsberichte zur Wirtschaftslage, Schriften des Instituts für Konjunkturforschung*, 1939/40, Heft 1, May 26, 1939. In 1937 the *Wirtschaftsgesellschaft m.b.H.*, capitalized at 100,000 RM, was established for the purpose of maintaining highway freight depots with garage facilities and lodging accommodations for chauffeurs. Cf. Long, *Transport Control Abroad*, p. 145.

²¹⁴ Georg Körner, "Aufbau und Organisation des deutschen Verkehrswesens", *Jahrbuch der nationalsozialistischen Wirtschaft*, p. 436, and Part II, p. 509. The private railways, few in number, of 13,937 km length in 1936, usually narrow gauge and short, are hardly protected; but, although they suffer keenly at the hands of motor transport, special sources of demand—the needs of the potato crop, or conditions of ice in East Prussia, for example—help to keep them in existence.

a solution.²¹⁵ Operators of tramp motor vehicles are now to be compensated according to ton-kilometer performance on a uniform scale. The *Reichs-Kraftwagen-Betriebsverband*, as the operator of the pool, is to carry the total risk. Obviously, an adjustment between the interests of the Reichsbahn and those of this association can be more easily effected than between the Reichsbahn and a multitude of small operators. The announced theory²¹⁶ below such regulations is that of "just competition" between the two forms of transportation.

The spirit of road-rail adjustments in Germany has been protective but it has seemed less tender of the railways than the analogous legislation in Great Britain.²¹⁷ In the latter country the road and rail traffic act of 1933 afforded biased relief to the railways from highway competition inasmuch as the railway companies received the right, with the approval of the Rates Tribunal, to make agreed charges for the carriage

²¹⁵ In March 1939, the demand in the tramp motor vehicle traffic exceeded the supply by 15 per cent. This shortage was manifest despite the fact that most motor vehicles, commandeered during the winter for the fortification of the West Wall, had been put back into circulation. Altogether, 15,200 motor trucks had been used for this purpose, and of those, 85 per cent belonged to the transport industry and 15 per cent to persons who used their trucks for and in connection with their trade and business. These figures are meaningful as they clearly indicate that in emergencies the first type can be drawn upon without violently disturbing the operation of individual firms or corporations. *Halbjahrsberichte zur Wirtschaftslage*, May 26, 1939.

²¹⁶ The act of March 26, 1935 began: "In order to secure a just [gerecht] competition between railways and motor vehicles . . ."

²¹⁷ Cf. Royal Commission on Transport, *First Report: The Control of Traffic on Roads* (Cmd. 3365, 1929-1930), *Second Report: The Licensing and Regulation of Public Service Vehicles* (Cmd. 3416, 1929-1930), *Final Report: The Coordination and Development of Transport* (Cmd. 3751); *Report of the Conference on Rail and Road Transport* ("The Salter Conference") (Ministry of Transport, 55-170, 1932); the Road and Rail Traffic Act, 1933; the Goods Vehicles (License and Prohibitions) Regulations, 1936; the Road and Rail Traffic Act (Exemption) Regulations, 1936; the Motor Vehicles (Authorizations of Special Types) Regulations, 1936; the Motor Vehicles (Driving Licenses) Regulations, 1936; the Goods Vehicles (Keeping of Records) Regulations, 1935; the Road and Rail Traffic Act, 1933 (Appeal Tribunal) Rules, 1934; the Motor Vehicles (Construction and Use) Regulations, 1937; the Road Traffic Acts of 1934 and 1937; the Road Haulage Wages Bill, 1938; *Memorandum of the Railways*, November 23, 1938; and the *Report of the Advisory Council*, April 4, 1939.

of merchandise. The comparison has far-reaching interest, since the railways in Great Britain are privately owned, and a theoretical objection to government ownership has been the risk that government's stake as proprietor would cause it to be unduly protective in its treatment of an obsolete facility. It has not been surprising that the British act of 1933 found considerable disfavor with operators by land and water and that the movement toward coordination seemed to lose headway. The moral may also be pointed by allusion to France where the principle of government operation of railways is ascendant. The program of transport coordination embodied in the decree-law of August 31, 1937 and its many amendments²¹⁸ permits rail truckage to be abandoned where haulage by truck is more economical. On the other hand, it should be added, railways are given preference in handling bulk transport. Short-haul trucking is subject to a quota system. Long-distance trucking is taxed at special rates but operators are exempt from the tax if they join organizations licensed to charge rates according to scales agreed upon with the National Railway Company. The superior transport council may eliminate long-haul highway trucking not regarded as necessary in view of available railway service. Much of this resembles the coordinative control used in Germany. But it is interesting that trucks operated by a person for and in connection with his business or trade are subject to less restrictions in Germany than in Great Britain and France. Various German interests, both commercial and agricultural, are engaging in such haulage on a scale that threatens to upset the balance of the "just competition" which is the proclaimed ideal of adjustment among the several means of transport.

(3) *Water-rail relationships.* A friendly critic of the Reichsbahn, writing in 1926, said: "There is one danger which menaces the healthy development of the Federal Rail-

²¹⁸ Dec. 31, 1937; Feb. 25, 1938; Apr. 7, 1938; June 17, 1938; Aug. 20 and 21, 1938; ten decrees issued on Oct. 12, 1938; Nov. 12, 1938; Jan. 12, 1939; and Sept. 19, 1939. Important decrees prior to 1937 bearing on the subject are those of Apr. 19, 1934; May 15, 1934; Sept. 21, 1934; Feb. 25, 1935; July 15, 1935; and Nov. 14, 1936.

way, for during recent years there has been a lively agitation in economic and political circles in favor of developing the German navigation network."²¹⁹ He added: "Schemes for the construction of new artificial waterways are under discussion, which would not only absorb many hundred million marks, but are mainly intended to divert the goods traffic from the railways to waterways."²²⁰ Enthusiasm for inland waterways obviously did not originate with National Socialism. But in the Third Reich it has been an active policy not only to foster the waterways but also to extend them. The shortage of freight facilities, apparent in 1937 and perhaps a phase of relative neglect of railway renewal and improvement, has been

²¹⁹ Alfred von der Leyden, "The German Federal Railway Company", *Annals of Collective Economy*, November-December 1926, vol. 2, p. 332. The critical attitude toward waterways is illustrated: "Reichsbahn und Wasserstrassen", *Denkschrift der Deutschen Reichsbahngesellschaft* (January 1927); E. Giese, *Eisenbahn- oder Wasserstrassenbeförderung?* (Berlin, 1927); E. von Beckerath, "Neudeutsche Kanalpolitik", *Strukturwandlungen der deutschen Volkswirtschaft*, 2 vols. (Berlin, 1928), pp. 199 et seq.; (mildly) F. Napp-Zinn, *Binnenschifffahrt und Eisenbahn* (Köln: wirtschafts- und sozialwissenschaftliche Studien, N.F. Heft 3). For a rebuttal of such criticism, cf. Kurt Wiedenfeld, "Transportwesen", *Grundriss der Sozialökonomik*, V. Abt., III. Teil (Tübingen, 1930). The military advantages of waterways are extolled: R. Hennig, *Grundzüge einer militärischen Verkehrspolitik* (Berlin, 1917); W. Butz, "Wehrwirtschaftliche Verkehrspolitik", *Der deutsche Volkswirt*, Jan. 15 and 22, 1937; K. W. Förster, *Verkehrswissenschaft und Krieg* (Hamburg, 1937); W. Mende, "Die Wehrwissenschaft und die deutschen Binnenwasserstrassen", *Der deutsche Volkswirt*, Nov. 25, 1938. Doubts on the advantages from the military side have been voiced recently: W. Teubert, "Verkehrsaufgaben im Sinne der neuen Wirtschaftsziele und der Raumordnung", *Der Vierjahresplan*, July 1938. For a review of the whole literature, cf. Wilhelm Ludwig Schneider, "Wasserstrassenpolitik", *Schriften des Instituts für Konjunkturforschung*, 13th Year, Heft 4 N.F., April 3, 1939, pp. 489-501.

²²⁰ It should be said that the grievance has sometimes been the other way. Cf. League of Nations, *Report of the Special Committee on Competition between Railways and Waterways submitted to the Advisory and Technical Committee for Communications and Transit* (Geneva, 1929), which was stimulated by a report on Rhine navigation by Walker D. Hines, who "had been struck by the unanimity of the complaints of Belgian, Dutch, French and German shipping interests as to the unfavorable effect upon Rhine navigation resulting from recent development of railway competition" (p. 9). The main report deprecated the tendency "to favor national seaports to the detriment of foreign ones" (p. 43). A spokesman for the Reichsbahn (the "conscience" of which was declared to be clear) pointed out that the proportion of rail- and water-borne traffic in Germany was the same in 1925 as in 1913 (p. 147).

offered as a justification of the attitude toward waterways,²²¹ which is reflected in the absence of restrictive taxation.

In point of weight, the traffic carried by the waterways of Germany moved 23.9 per cent of the total tonnage.²²² Of the export goods which crossed Germany's borders in 1934, 47 per cent were carried in inland navigation, 37 per cent by rail, and 18 per cent by ocean shipping; of the imports, 33 per cent by inland waterways, 25 per cent by rail, and 42 per cent by ocean navigation.²²³

The attitude of the government toward inland waterways since 1933²²⁴ has been definitely one of protective promotion. Two acts, notably, have embodied this purpose. That of June 16, 1933 proclaimed its concern in the alarmist title, "The law to combat the crisis in inland waterways navigation".²²⁵ The minister of transport was authorized to unite the freight-carrying lines in associations, which would act under public auspices and be subject to the supervision of the ministry.²²⁶ The minister was authorized to establish, or to have established by the associations, minimum and maximum rates for

²²¹ Supplement to the Weekly Report of the German Institute for Business Research, September 22, 1938. *Halbjahrsberichte zur Wirtschaftslage*, May 26, 1939. The spirit of harmonious coöperation among all traffic carriers is reflected in G. Koenigs, *Die neuen Gedanken in der deutschen Verkehrspolitik* (Schriften des Instituts für Verkehrswissenschaft an der Universität Leipzig, Heft 7) (Leipzig, 1938); O. Most, "Die gegenwärtige verkehrspolitische Lage in Deutschland", *Zur Verkehrspolitik im Dritten Reich* (Verkehrswissenschaftliche Forschungen, Heft 1) (Münster i. W., 1934).

²²² League of Nations, Special Committee on Competition between Railways and Waterways, *op. cit.*, p. 57. The percentage had been 21.6 in 1913, had fallen to 11.9 in 1921, but was about back to 21.8 in 1925.

²²³ Gährs, "Wasserwirtschaft und Binnenschifffahrt", *Archiv für Eisenbahnenwesen*, May-June 1937, pp. 545-9; cf., also, *Halbjahrsberichte zur Wirtschaftslage*, May 20, 1938, p. 69.

²²⁴ Germany denounced the provisions of the Treaty of Versailles regarding the internationalization of her principal waterways on November 14, 1936 (*RGBl* II, p. 361).

²²⁵ *RGBl* II, p. 317.

²²⁶ An executive ordinance of September 1, 1933 (*RMBl* p. 442) created the *Mitteldutsche-Reedereien-Vereinigung*; that of January 12, 1934 (*RVBl* p. 5) created the *Elbe-Reedereien-Vereinigung*; and that of September 15, 1934 (*RMBl* p. 617) established the *Schiffer-Betriebsverband für den Rhein*.

inland navigation.²²⁷ The evident purpose was to stabilize a disorganized industry. If necessary, acting with the association, the minister might restrict existing barge and tug traffic and curtail new traffic facilities. The members of the associations might be assessed for the cost of destroying superfluous equipment. But the motive was protective, not punitive. This was shown in the second important act, that of July 2, 1936, which abolished the tax on the transportation of passengers and freight by waterways.²²⁸ While in 1938 the waterways traffic exceeded that of 1929 by one fourth, the total tonnage of river and canal boats was less. Effective from March 1, 1938, restrictions placed on the increase of boats in the eastern river districts have been abolished.²²⁹ The diversion of raw materials and bulk goods to the waterways has been actively encouraged. It was claimed that through the collaboration of committees, canal and water transport charges in 1937 were still 20 per cent lower than in 1928.²³⁰

Meanwhile new links were in course of execution.²³¹ Outstanding among these was the completion of the *Mittelland* Canal, which forms the first through-connection of the waterway systems of East and West. Outstanding, also, was the project of the Rhine-Main-Danube waterway, which offers communication by water from the North Sea, across greater Germany, to southeastern Europe and the Black Sea. The Adolf-Hitler Canal, connecting the Upper Silesian iron and coal fields with the Oder, was completed at the end of 1939. This waterway will gain in importance on the completion of the Oder-Danube Canal, one of its branches, as then direct coal shipments can be sent from Upper Silesia to the southeast of Europe. Both canals are part of a system which, when finished, will change the transportation face of southeastern and central Europe.²³²

²²⁷ *Jahrbuch der nationalsozialistischen Wirtschaft*, p. 602; *Jahrbuch des öffentlichen Rechts der Gegenwart*, vol. XXII, pp. 205-6.

²²⁸ *RGBl* I, p. 531.

²²⁹ *Halbjahrsberichte zur Wirtschaftslage*, May 26, 1939, pp. 64-5.

²³⁰ Supplement to the Weekly Report of the German Institute for Business Research, September 22, 1938, p. 4.

²³¹ *Ibid.*

²³² *Frankfurter Zeitung*, October 24, 1939.

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²³³ Körner, *op. cit.*, pp. 412 et seq., 418. It will be observed that air commerce is not included in the design of the transport group. Air traffic is subject to the direction of a special ministry created by the ordinance of May 5, 1933 (*RGBl* I, p. 241), which supervises the *Deutsche Luftkansa AG*, the monopolistic operating company, and the *Reichverband der deutschen Luftfahrtindustrie e.V.* (the top organization of the whole aircraft industry).

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